Lectures
ON
THE SURGICAL TREATMENT OF ANEURISM
IN ITS VARIOUS FORMS.

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LECTURE V.—PART I.

IN my last lecture I tried to show that aneurisms of the subclavian artery are usually of the tubular form, often of comparatively small size, and are generally connected with extensive disease of the arteries on the proximal side of the aneurism; that the Hunterian operation is seldom successful, even when applied as low as the third part of the artery, and has never but once succeeded when applied to the first part; that therefore some safer method of treatment should be sought for, at least until we can be really sure of obliterating an artery without dividing it; further, that in some of the cases in which the first part of the artery has been tied the second part could possibly have been secured, and in others a trial might have been given to proximal pressure; and that in many of the cases where the third part of the artery has been tied proximal pressure could also have been used, and I instanced two cases, in one of which such pressure had been completely successful, whilst the other is under treatment with fair prospect of success.

I must now pass on to consider the more dangerous methods of Manipulation and Galvano-puncture; and discuss the propriety of superseding any treatment directed to the aneurism itself by removing the limb.

Manipulation of the sac was recommended by Sir William Fergusson in 1856; and has, hitherto, as far as I have discovered, been practised in five cases of subclavian aneurism and two of aneurism of the lower extremity. It is a suggestion which rests unquestionably on a sound pathological basis. Sir W. Fergusson quotes some striking cases in which cure was in all probability due to impaction of clot. Allowing that any other explanation of such facts could be found, yet the anatomy of preparations such as I have brought before you proves conclusively the reality of this mode of cure; and in Sir W. Fergusson's first case there was the most convincing evidence that such impaction had been produced by the manipulation, for the pulse below the aneurism, which had been felt immediately before the operation, ceased at once; the collateral arteries also seem to have enlarged, and it is possible that a more quiet life might have been followed by cure; nevertheless the disease was not cured, and the sac ultimately burst. In his second case the treatment by manipulation does not seem to have produced any marked effect at the time, but the disease afterwards underwent spontaneous cure. In a third case, at Guy's Hospital, under the care of Mr. Hilton and Mr. Cooper Forster, manipulation was performed for a minute and a half. The sac afterwards gave way, whether in consequence of the manipulation or not Mr. Poland thinks doubtful. In the only successful case—that of Littre—the aneurism was of the size of a goose's egg, and on the point of bursting. After the failure of internal treatment pursued for about four months, "manipulation was performed by gentle and steady alternating pressure, and some clot was displaced towards the distal end of the artery." Ten days afterwards it was found that the pulse had ceased in the radial, brachial, and axillary arteries, and the tumour had become more solid. The arm gradually lost sensation and muscular power, and as gradually regained it; slight pulsation also returned in the radial artery. "When he was again examined, sixteen months afterwards, the tumour was of the size of a walnut, and the sensation and motion entirely restored." The history is as clear as it can be of impaction of clot at the distal part of the artery, imperfect at first, but gradually filling the artery and the aneurism; and it is impossible to doubt that this impaction was produced by the manipulation described. It is true that pernitrate of iron was administered internally, and that pressure was made over the tumour for a part of the time; but the symptoms of cure by impaction of clot are too convincing to allow us to hesitate in attributing the cure to the manipulation. In the fifth case (Morgan's) the manipulation failed to detach any clot, and remained without result. I will not detain you by any reference to the cases in the lower extremity, further than to say that one of them, at least, was highly satisfactory (Mr. Teale's).

Such being the present experience of manipulation, I think it justifies the repetition of the proceeding in a suitable case of subclavian aneurism. That in so formidable a disease the operation undertaken should sometimes produce death is, I fear, inevitable; and the fact that, in most of the few cases which have been treated in this manner, the proceeding, when not beneficial, has been at least harmless, is one which is very encouraging for its repetition. Surgeons have, no doubt, a natural predilection in favour of cutting operations. This predilection is not only natural, but laudable, in my opinion; for I believe it tends greatly to advance the progress of our art. I think no greater proof of it could be adduced than the way in which this subject has been treated. Manipulation of an aneurism, it is said, may rupture the sac, and may not succeed in producing any impaction of clot; while, if it does so, the effect of such impaction is doubtful. Grant all this. Yet out of seven cases in which it has been tried there is no clear proof of rupture of the sac in any one, and only a suspicion in a single case; while there is clear evidence of cure in two, and a good advance towards cure in another. The proceeding is, nevertheless, often spoken of as unjustifiable; and a surgeon who undertakes it is thought rash. The cutting operations, on the other hand, which have been practised for this disease are constantly followed by death; and the cures are rare indeed. Yet no surgeon is blamed for repeating them; on the contrary, it is rather looked upon as a proof of decision and boldness.

The cases which would be looked upon as favourable for manipulation are those in which there is some evidence of deposit of fibrine in the sac from the thickening of its walls, where the aneurism is not of large size, and where its distal extremity is easily accessible to touch; so that the surgeon has a rational prospect of forcing some of the clot into it.

I regard galvano-puncture in about the same light—i. e., as a possible means of cure for cases which can hardly be treated otherwise, except by ligature of the innominate or first part of the subclavian. Mr. Poland catalogues four cases—viz., the well-known case in which Mr. B. Phillips tried galvano-puncture unsuccessfully, but without any damage, and where Liston afterwards tied the artery in its first part; the successful case of Abeille, which I quoted in a previous lecture; a case under Schuh's care, in which no result was obtained, and which was afterwards treated by Brasdor's operation; and one under the care of Dr. Sands, where fatal secondary hæmorrhage ensued. To these I must add another case recently under Dr. Clifford Allbutt's care. The tumour was as large as two fists. The continuous current was employed through two needles coated with vulcanite and immersed in the blood of the sac, one connected with the positive, the other with the negative pole of a Smee's battery (Foveaur's arrangement) of from five to fifteen cells, for forty minutes. The effect was very marked and very striking at first: pulsation ceased altogether till next morning, and then returned in the inner half of the tumour, leaving the outer half pulseless when the man left the hospital fourteen days afterwards. But this effect was transitory, and the man returned to hospital with the pulsation as active as before. The operation was repeated for an hour. For three days or more the aneurism was quite pulseless, then it began again to soften and pulsate; jaundice supervened, and then hemiplegia, marking the occurrence of embolism; sac ruptured into the cellular tissue. On post-mortem examination, the left carotid was found plugged from its origin to the base of the skull (the aneurism being on the right side); the liver appeared healthy, but it seems probable that the jaundice must have been caused by plugging of some vessel in it. The case will doubtless be published more at length elsewhere. It was a very encouraging one at first, from the relief to the general

symptoms and the total suppression of pulsation in the tumour. Its conclusion was therefore the more disappointing, and shows strongly the need for more definite information about the results of electrolytic action on the blood, and for clearer ideas how coagula may be formed stable enough to lead to definite lamination and the permanent cure of the tumour, without such inflammatory action as will prove fatal.

Finally, it has been proposed by Sir Wm. Fergusson to amputate at the shoulder-joint in cases of subclavian aneurism inaccessible to other measures. The limb being taken away, much of the circulation through the diseased vessel, though not all of it, must cease; and by this means it is hoped the progress of the malady will be stopped. The operation has been practised, as far as I know, only once. In this case (Mr. Spence's) the limb was threatened with gangrene, and the operation was very clearly indicated. The man recovered, and lived four years; when he died from some cause connected with the aneurism, which was not distinctly ascertained, as he was no longer under observation. But it seems likely that the aneurism, which had diminished very much after the removal of his arm, had ultimately extended into the chest, involving the innominate and aorta. In this case, however, the condition of the arm alone furnished a sufficient motive for the operation, which must be reckoned as a very successful one. And the history of cases such as Mr. Syme's and Dr. Morton's, in which the limb has been removed successfully in cases of aneurism in the axilla, prove that the diseased condition of the vessels need not be held to be an absolute contra-indication to the operation. But it is a course, I think, which no surgeon could contemplate without repugnance; and though I do not deny that it may become necessary to resort to this measure hereafter if the methods of treatment which I have above discussed disappoint our hopes, I think that at present amputation should be reserved for cases in which the limb is gangrenous or threatens to become so. Mr. Spence's case, as well as the anatomy of the cases which I have brought before you, go to prove that amputation must be looked upon as at best only a palliative. The disease will probably extend towards the heart, but in appropriate circumstances it may prolong life.

Such then, Sir, is our present experience of the surgical treatment of subclavian aneurism; and gloomy enough it is. I am so sanguine, however, as to hope that we are on the eve of a better state of things. I shall try to show you, in speaking of abdominal aneurisms—which subject will occupy the remainder of the course,—how much has been done of late to bring them under the command of surgery; and we may hope, by following the same ideas, to obtain similar, if not the same, success in the treatment of the still more difficult affection of subclavian aneurism.

The abdominal aorta is very commonly the seat of aneurism; and this affects the trunk of the artery usually at or near the origin of the cœliac axis or superior mesenteric. Less commonly, the trunk of the artery becomes aneurismal close to, or up to, its bifurcation. Several examples of aneurism in this situation are on the table; and the diagram shows the state of the parts in a case of this kind where a cure was effected by pressure applied to the aorta higher up.

Again, aneurism may affect the branches of the main artery; and, as far as I have seen, the artery most usually affected in such cases is the superior mesenteric.

Aneurisms affecting the higher part of the artery, or its higher branches, as the cœliac axis, are inaccessible to proximal measures, and, as they lie under the viscera, they cannot be dealt with directly, but may be made the subjects of distal pressure. Aneurisms of the lower part of the artery are, in thin and tall persons, accessible to proximal pressure, as is proved by Dr. Murray's case; but most of the aneurisms in the belly which have been cured by pressure above have been of the iliac arteries, usually the external. Again, aneurisms which affect the superior mesenteric artery may become the objects of treatment. I shall therefore divide abdominal aneurisms into three classes:—

1. Those aneurisms situated so high up as to be inaccessible to any known surgical measure, except distal pressure or ligature—i. e., such as affect the artery or its branches on a level with the lower border of the pancreas.

2. Those which arise from the trunk of the artery at a lower point (say about the origin of the inferior mesenteric), or which affect one of its branches (superior or inferior mesenteric) at so low a point that their pulsation can be arrested by pressure applied to the trunk of the artery. Here proximal pressure is obviously our first resource, assisted or not by distal pressure.

3. Those which affect the iliac arteries. Here the choice lies between three measures—the Hunterian operation, the old operation, and compression. Galvano-puncture might be added, perhaps, by some; but I shall not discuss this method as applied to these aneurisms, believing that it would only be proposed in very exceptional cases. Aneurisms which affect the artery as high as the cœliac axis are not on that account incapable of cure. As a proof of this, I produce a preparation (from St. George's Hospital Museum, vi. 132) of spontaneous cure of an aneurism of the cœliac axis which I discovered in the body of a man who died of another disease, and had never complained of the aneurism while he was under observation. The sac is obliterated all but a channel in the centre, now filled with soft clot, and through which the circulation must have gone on into the three great branches. Here is another and a very beautiful preparation from the Richmond Hospital, Dublin, in which, the patient having died of laryngitis, an aneurism, seated high up in the abdominal aorta, was found far advanced towards cure. Most of us have seen the curious preparation in the Hunterian Museum of the abdominal aorta of a jaguar with an aneurism pretty nearly consolidated.

Abdominal, like all other aneurisms, differ immensely in their symptoms and the rapidity of their course. This is a fact which should surely be taken account of in making up one's mind whether to subject a patient to treatment involving grave risk to life, such as we know that forced compression of the aorta, long continued, does certainly involve. Besides the cases of spontaneous cure to which I have referred, and the instances of temporary cure which have certainly been procured by the treatment described by Mr. Tufnell, we should not forget that there are cases in which the disease progresses so slowly as really not to interfere at all with the patient's enjoyment of even active life.

Let me refer to two preparations on the table. The first (kindly lent to me by Mr. Jolliffe Tufnell) shows an aneurism of the right common iliac artery almost consolidated, and one of the left internal iliac artery completely consolidated and cured. It was taken from the body of a man, aged fifty-five, who died in the City of Dublin Hospital from Bright's disease. The entire cure of the one aneurism, and the partial cure of the other, had been the result of confinement to bed, and the reduction of the heart's action, which was produced partly by this cause and partly by the weakness of its own muscular walls. Had he lived longer there is every reason to think that the tumour in the common iliac artery would also have been cured. The other preparation, and its most interesting history, have been sent to me by Dr. Stannus Hughes. The latter, I hope, will be published *in extenso*. I can only here give the briefest reference to it. The tumour was taken from the body of a distinguished medical man in Ireland, who had had a pulsating tumour in the abdomen for at least ten years. During the whole of that time he had led an unusually active life, being especially fond of horse exercise, and so completely able to enjoy such violent exertion that little more than a fortnight before his death he had been engaged in breaking in a young vicious horse for a friend near Dublin. This gentleman had persuaded himself, and had endeavoured to persuade his surgical colleagues, that the tumour he suffered from was not an aneurism; and most of them were of that opinion, for pressure on the aorta above the tumour did not stop its pulsation (though it seems doubtful whether complete pressure could be made); its movements were more of the "up and down" nature of pulsation communicated to a solid tumour from an artery lying beneath it than the expanding pulsation of aneurism. The surface of the mass felt hard and irregular; there was a bruit; but both the pulsation and bruit could be at once stopped if he placed himself in a prone position, and drew the tumour forward with his hands. From these circumstances, from his emaciated appearance, and the fact that a brother had died of cancer, most of the consultants seem to have thought that he had malignant disease; others believed it to be disease of the stomach, accompanied by inordinate aortic

pulsation. He himself tried to convince himself that the tumour proceeded from impaction of fæces. It was only three days before his death that the supervention of agonising neuralgic pains obliged him to request medical aid. He had been manipulating the tumour freely in order to prove to his advisers that it was not an aneurism, and they had just left the room to consult on the case, when they were summoned back to him, and found him dying from internal hæmorrhage. The rupture of the sac was no doubt caused by his own manipulation. It is on the anterior part of the aneurism. The tumour springs from the front wall of the aorta, and this was obviously the reason why drawing it forward stopped its pulsation. The old coagula, by which the progress of the disease had been so long resisted, are peculiarly hard and knobby, producing the lobulation which during life so much resembled that of a solid tumour. The history of such cases (and cases of a somewhat similar kind are not very uncommon) teaches us that we ought to watch the progress of an abdominal aneurism carefully when the patient is placed at complete rest, before venturing to interfere surgically.

The only case which I know of where an aneurism seated at so high a level as the cœliac axis has been made the subject of deliberate surgical treatment is Mr. Bryant's recent case at Guy's Hospital. In this case, of which an account and a drawing were lately laid before the Royal Medical and Chirurgical Society, no previous attempt was made to procure the subsidence of the disease by general treatment. Distal compression of the aorta was used on the first day for three hours incompletely, and then for about nine hours, so as completely to stop the pulse in both femoral arteries. "The tumour continued to pulsate the whole time," but it was thought next day to be harder. Twelve hours after the first application the aortic tourniquet was reapplied, but was removed after four hours in consequence of alarming symptoms—unsteady and feeble breathing, great weakness of pulse, coldness of feet, and congestion of the venous system; and he died eleven hours after the removal of the instrument. On post-mortem examination the cause of death was found to be bruising of the small intestine high up, and consequent peritonitis. There were also ecchymoses in the mesocolon and the mesentery of the injured jejunum. The following is a description of the aneurism in the words of Mr. Bryant, who has also kindly permitted me to make use of the drawing:—"An aneurism the size of an orange was found, which included the cœliac axis and the origin of the superior mesenteric artery. It communicated with the aorta by an opening the size of a halfpenny. It was crossed by the pancreas. The sac contained on an average a layer of clot one-third of an inch thick lining its interior, but not very adherent, and this clot rested below on a rounded mass of clot one inch thick. It was marked over by plexiform white lines, the edges of planes of fibrin running through it—the remains of parts which had successively been temporarily exposed to the current."

Now in commenting on a case so recent, so well-known, and so original as this one, I feel that I may use all possible freedom; since the attempt to cure so grave an affection, and especially by a method which has not previously been employed, is not to be judged of by the unsuccessful result of a single trial, but ought to be repeated if there seems any rational prospect of its success. Speaking theoretically only, I should have thought that distal pressure, applied near the end of an artery with so many branches as the abdominal aorta, could hardly produce much effect on a tumour as high as that described. The principle upon which the distal ligature was originally recommended was, that it prevented the exit of blood from the sac, and thus compelled the blood to coagulate, the circulation having been derived into the collaterals above the tumour. Mr. Wardrop added, that the circulation of a certain amount of blood through the tumour into collaterals below it would do no harm. Let us consider this also. I have shown, in addition, that the coagulation of blood in the distal artery, after its ligature, is propagated into the portion of the sac which is in connexion with that artery, and that thus aneurismal sacs may be obliterated in part, just as they so often are by the distal impaction of fibrine. But which of these pathological or mechanical facts justifies us in expecting benefit from distal compression in such an aneurism as that described here? The amount of blood which circulates into the upper part of the abdominal aorta while the lower part is being compressed may be somewhat lessened during the compression; but the stream of blood through the superior mesenteric, and probably through the branches of the cœliac axis, surely must be increased in order to carry on the circulation; for the compression which is made on the lower part of the aorta will probably close the inferior mesenteric artery, and the intestines will receive their blood chiefly through the superior. Thus I think that an aneurism which involves the root of the cœliac axis and superior mesenteric arteries will be likely to be subject to an increase instead of a diminution of circulation, while the lower part of the aorta, and with it the inferior mesenteric artery, are compressed. Nor do the notes of the case absolutely contradict this impression; for they state plainly that no diminution was observed in the pulsation of the tumour; and though next day it was "thought to be harder," everyone knows how deceptive such impressions are likely to be. Nor can we tell how much of the coagula in the sac was formed during the eleven hours in which he was dying, and how much is to be attributed to the previous compression.

I willingly allow, however, that all this is theory, and that the results of practice often contradict our theoretical impressions. I trust it may be so here, and that we may find in distal pressure, as introduced by Mr. Bryant for the cure of aneurisms of the aorta inaccessible to proximal measures, a valuable auxiliary to the at present very inadequate resources of our art against that formidable affection. It would be a great encouragement to persevere in this treatment, and to face the dangers which Mr. Bryant's case so clearly exemplifies, if a diminution in the force and rate of the pulsation in the aneurism were observed on compressing the distal end of the artery, similar to that noticed in some of the cases of innominate aneurism which I have brought before you. At any rate, the plain and confessed danger of compressing the aorta for many hours under chloroform, the slow progress of abdominal aneurism in some cases, and the occurrence of spontaneous cure in others, I think justify me in urging the propriety of giving a patient trial to the internal treatment before resorting to such dangerous measures.

The only case, as far as I know, since Astley Cooper's, mentioned by Mr. Guthrie, p. 109, in which distal ligature has been practised for the treatment of abdominal aneurism was one under Sir W. Fergusson's care* in the year 1868.† The tumour extended from the border of the lower rib on the left side to three inches below Poupart's ligament, and from two inches on the right side of the linea alba round to the spine. It was increasing rapidly. On March 14th the femoral artery was tied in Hunter's canal, the sartorius muscle having been drawn to the inside of the vessel. In the evening the pulsation in the upper part of the tumour was much less, while below Poupart's ligament it could not be felt. But this improvement was temporary. The man died on April 10th—a month after the operation; the account does not state precisely from what cause, but probably from exhaustion caused by the presence of the tumour and by subcutaneous hæmorrhage, for the lower part of the tumour was found to have given way, and the blood was making its way down the thigh.‡ The aneurism arose from the abdominal aorta in front of the third lumbar vertebra, where the posterior wall of the vessel had given way for about an inch and a half, being very atheromatous at that point. The sac was formed apparently of the peritoneum and adjacent tissues above, but below no sac could be recognised.

As the subject of mesenteric aneurism is not perhaps very familiar, and the idea of treating it by surgical means is a new one, I have thought it desirable to produce a few drawings of the usual forms of this affection, and to illustrate the question by some particulars of a case now under observation.

William W——, aged thirty-nine, a painter, was admitted into St. George's Hospital on Nov. 22nd, 1871, under

* Pathological Transactions, xix., 162.

† In Mr. White's case, recorded by Mr. Guthrie, p. 90, Brasdor's operation was performed for "inguinal aneurism," meaning, as I understand it, aneurism of the upper part of the femoral artery.

‡ Note that here the rapid emaciation which preceded death was thought to be due to pressure on the receptaculum chyli. In a case which recently proved fatal at St. George's Hospital the obstruction to the passage of chyle was shown by the existence of a large fluid tumour formed by the dilated chylifèrous vessels.

Dr. Barclay and transferred to Mr. Pollock. Says he has lived temperately, but admits having had syphilis and gonorrhœa; no cancerous history; usually fair health; bowels confined. Six weeks before admission, while straining at stool, felt a swelling in abdomen which gave him some pain. Went on with work; pain not severe. The patient was under the influence of lead-poisoning when he first noticed the aneurism. On admission, pale and rather anxious expression; pulse weak. There is a pulsating tumour the size of an orange, the centre of which is a little to the left of umbilicus. The pulsation is synchronous with the heart's systole. There is a bruit in the rounded part of the tumour, and this bruit is audible, and, indeed, seems to get louder as the stethoscope is carried upwards. Tumour freely movable, and fingers can be passed partly under it. Pressure on abdominal aorta nearly stops pulsation, and pulsation appears to be decreased by pushing tumour to the left side.—Nov. 28th, 2.30 P.M.: Chloroform administered, and abdominal aorta compressed by tourniquet; pulsation nearly stopped both in tumour and femorals. Pressure kept up (with one interval of about five minutes) for two hours ten minutes. As soon as the tourniquet was screwed down, the radial pulse became very notably depressed, at once improving when the pressure was removed. When the pressure had been kept up the time stated above, it was found necessary to relinquish it on account of extreme faintness and vomiting. No change in tumour. Next day (29th), he complained of pain in abdomen, and there was a large quantity of blood in urine. He frequently vomited during the night.—2 P.M.: Ether administered, and pressure again made on abdominal aorta by tourniquet. Pulsation nearly, but not quite, arrested. This was maintained for one hour and a quarter, when it was found necessary to relinquish it on account of irregular pulse and faintness.—30th: Tenderness of abdomen and hæmaturia. Tumour feels more solid, but pulsates forcibly. Some pressure on aorta at intervals by a weight.—The blood in the urine gradually diminished and disappeared, and since December 1st he has nearly every day kept up sufficient pressure on the abdominal aorta by a tourniquet to considerably diminish the pulsation in tumour, for several intervals in the day; on the average, about four times a day for one hour and a half.—May: The tumour is unquestionably more solid than when he was admitted, but pulsates still very forcibly. His health remains much the same. Iodide of potassium was tried, but produced rapid iodism, with no effect on the tumour. He left the hospital in the early part of June for a change, intending to return shortly, and to continue the same treatment at home. The tumour had certainly made no progress since his admission; but, on the contrary, seemed somewhat more solid.

In this case the diagnosis has not been verified by anatomical examination; but there can, I think, be little doubt that the aneurism affects one of the mesenteric arteries, or one of their main branches, from its mobility and its shape; while the way in which the bruit can be traced upwards, along the course of the superior mesenteric, renders it most probable that this is the vessel implicated. Then comes the question of treatment. Rest and internal treatment appear not to be likely to produce a cure, yet they are all to which we can trust in this instance. Pressure on the abdominal aorta can only be borne for a short time and incompletely.

The question occurred of performing an operation, either by the old method, or by that of Anel; and in connexion with this question, as also with that of the application of pressure, it is interesting to look at the three specimens of mesenteric aneurism which I produce. This one, from the museum of St. Thomas's Hospital (Y 86), is such as I believe to exist in our patient. It shows a large rounded tumour below, closely connected with the small intestine at its lower end, which must obviously have been very movable in the belly, and, the upper part being concealed by the viscera, it might have been thought to be a limited sac. But the preparation shows that it runs up by a flask-like prolongation into the aorta, where at its communication with the trunk of the artery there is a second small aneurismal tumour close behind the cœliac axis. The extraordinary atrophy of the lower part of the abdominal aorta (well shown in the drawing) renders it probable that a good deal of the blood which should have been carried by that vessel passed into the dilated superior mesenteric. It is clear that no attempt could have been made to operate on this tumour without disaster, if not instant death. For if the surgeon, on exposing the tumour, had not given up the operation at once, it would have been impossible to control the hæmorrhage from the large branches arising everywhere out of the sac; nor could compression have been applied above the tumour without the greatest risk of contusing its dilated upper end, and so inducing fatal hæmorrhage in a day or two.

The second specimen, also from the same museum (Y, 89), shows a different, but not a more promising, form of aneurism of this artery. Here almost the whole artery is lost in an enormous rounded sac, only about an inch of artery being healthy at its origin from the aorta, and this would, of course, be situated behind the pancreas, and utterly inaccessible. Here, again, no interference could have been otherwise than injurious.

The third, from the museum of Guy's Hospital (No. 1504[45]), shows the condition of mesenteric aneurism in which surgical interference may possibly be of service. The artery, fairly healthy above, is dilated at its lower end only into a sac of no great size, and from which no vessels are seen to come off. Such aneurisms may be reasonably considered as under the control of pressure, if only the circulation can be suspended in them long enough to form a firm coagulum; for it must be remembered that, in an artery so crowded with branches as the superior mesenteric is, large vessels must open out of the sac or close to it, and that the soft clot, which is first formed by complete compression, will soon be subject to a rude test from the recurrent circulation. In a case like this, where no bruit can be traced upwards, nor any prolongation of the tumour can be felt, an enterprising surgeon might even think himself justified in exploring the parts with a view to the ligature of the trunk and branches of the artery close to the tumour; but it would be a desperate measure.* So would also the manipulation of the sac, a method of treatment which suggested itself to me in the present instance, but which was considered (and rightly as I think) too dangerous to be tried. The use of galvanopuncture is quite out of the question from the risk of wounding the intestines. On the whole, the present state of surgical experience leads to the conclusion that aneurisms of the superior mesenteric are frequently so extensive as to be beyond the reach of either pressure or any other external means; but that in exceptional cases they may possibly be cured by compressing the abdominal aorta above the tumour, in which compression the trunk of the mesenteric itself is likely enough to be involved. The fact that instances of spontaneous cure are met with† shows that the treatment by rest and diet is rational and hopeful.

ON THE ANATOMICAL & PHYSIOLOGICAL LOCALISATION OF MOVEMENTS IN THE BRAIN.

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(*Continued from p.* 85.)

POSSIBLY it will be objected by some readers that I speak in one article of several things which are very different. The reply is, that the same principle is displayed in each of them. That a hemiplegic patient's arm suffers more than his leg; that an aphasic patient cannot put out his tongue when he tries, although he moves it well in swallowing; that he cannot speak, and yet is able to understand all that we say; that a patient in *petit mal* loses consciousness and behaves strangely and outrageously,—these are evidently facts of different kinds, but they are all facts of the same

* Also, there is the question whether so limited an aneurism of this artery would occur from ordinary causes. In the account of this specimen in the Pathological Transactions, xi., 44, Dr. Wilks conjectures with great probability that the aneurism was the result of embolism. The patient had very advanced disease of the aortic valves, with dropsy, albuminous urine, and convulsions. It was probably in one of the fits that the fatal rupture of the aneurism took place.

† Preparation at St. George's Hospital, vi., 219.

order. In each instance there is reduction to a more automatic condition.

I pass now to speak of symptoms resulting from "discharging lesions" of the brain. The movements in chorea, as well as those in convulsion, are the results of abnormal discharges; but I shall speak in this paper only of convulsions ordinarily so called. Here, again, it may be objected that I consider still another topic; but I think it will be seen that the facts to be pointed out illustrate the same principle as do the symptoms already spoken of as resulting from "destroying lesions."

The nervous discharge in a convulsion differs from the discharge which occurs in a healthy movement in that it is sudden, excessive, and of short duration. The discharge being of the grey matter of processes for *movements*, there is caused by it a development of movements in the related and connected external regions. But the development of the movements is so abrupt, and the number of movements developed at once is so great, that the visible result is apparently a mere heedless struggle of muscles, in which at first glance it seems unlikely that we shall trace any kind of order. If we take for first investigation cases of *general* convulsion (such as are sometimes called "idiopathic epilepsy"), we shall, I believe, make little out. The paroxysms are too sudden, too quickly universal, and of too short duration for precise investigation. But if we take simple cases we shall, I think, accomplish a great deal. Most unquestionably the simplest cases of convulsion are those in which the spasm begins deliberately on one side of the body and affects that side only, or affects it more than the other. Such fits are often very limited in range; and then the patient is not unconscious, and can describe the seizure. As they begin deliberately, and as they may last many minutes, we are able, if we are present at a paroxysm, to note the place of onset and the order of spreading of the spasm. But even these simple convulsions represent the healthy movements contained in the region discharged only in outline and, so to speak, in caricature. For besides the facts already mentioned (that the discharge is sudden, excessive, and soon over) the discharge is of a *limited part of the brain*—of a part picked out, as it were, somewhat at random, by disease. The presumption is that there no more are isolated discharges of parts of the brain—an *excessive* discharge of a small part—*in health* than there are movements of single muscles in health. (Movements of single muscles, except perhaps in the face, are, Duchenne insists, only producible artificially—that is, by galvanism).

These seizures I used to call unilateral convulsions, but since the spasm (although it affects one side first and most) may *become* universal, it is more correct to call them "convulsions beginning unilaterally." Indeed, as is well known to careful clinical observers, they occur in all degrees, from twitching of a finger to universal convulsion. It is important to bear this in mind, especially as the same patient may have fits of several degrees; unless we do, we may erroneously suppose that he has several *varieties* of convulsions. Convulsions beginning unilaterally depend on disease of the same *cerebral* region as does hemiplegia of the common form, but hemiplegia depends on "destroying lesion" of the corpus striatum, the convulsion on a "discharging lesion" of the convolutions near to this body—convolutions in the region of the middle cerebral artery. We have, indeed, not only "a corpus striatum paralysis," but a "corpus striatum convulsion." To prove that the convulsion is one of the mobile counterparts of hemiplegia, we find both in the same case. After a severe fit which has begun in the hand, we occasionally find hemiplegia like that which is so often produced by a clot in the corpus striatum, like it in degree and in range, but unlike it in being transitory. When the convulsion is partial, the palsy left by it is partial too. Thus I have recorded the case of a patient who had paralysis limited to the arm after a convulsion of that limb dependent on tumour in the hinder part of the first (superior) frontal convolution.* (There was a tumour in each lobe of the cerebellum as well.) There can, in short, be no doubt that these convulsions are the mobile counterparts of hemiplegia.

When in such cases we do discover disease of the brain, we do find it in the region of the corpus striatum, but occasionally no local morbid change is found in any part of the brain. Nevertheless, the very fact that the convulsion has been one-sided or has begun on one side warrants the inference that there is in such cases also a local lesion, although we are unable to detect it. The lesion—when a lesion is discovered—involves more or less of convolutions which are near to, and, I suppose, *discharge through* the corpus striatum. I suppose that these convolutions represent over again, but in new and more complex combinations, the very same movements which are represented in the corpus striatum. They are, I believe, the corpus striatum "raised to a higher power." *Discharge** of the grey matter of these convolutions *develops* the same groups of movements which are *lost* when the corpus striatum is *destroyed*.

But there are several varieties of convulsions beginning unilaterally. They may be classified according to the places of onset of the spasm. There is nothing more important than to note where a convulsion begins, for the inference is, that the first motor symptom is the sign of the beginning of the central discharge.

There are three parts where fits of this group mostly begin—(1) in the hand; (2) in the face, or tongue, or both; (3) in the foot. In other words, they usually begin in those parts of one side of the body which have the most voluntary uses. The order of frequency in which parts suffer illustrates the same law. I mean, that fits beginning in the hand are commonest; next in frequency are those which begin in the face or tongue, and rarest are those which begin in the foot. The law is seen in details. When the fit begins in the hand, the index-finger† and thumb are usually the digits first seized; when in the face, the side of the cheek is first in spasm; when in the foot, almost invariably the great-toe.

In each of these varieties there must be some difference in the situation of the grey matter exploded. In one part the movements of the hand have the leading representation, in another part those of the cheek and tongue, and in a third those of the foot. I say *leading* representation because spasm of the hand &c. is only the *beginning* of the seizure. I had under my care a patient whose fits always *began* in his left thumb. We found, after death, a tubercle the size of a hazel-nut in the hinder part of his third right frontal convolution. Now in this case the most that one could say was, that in the convolution or region first discharged there lay processes for movements in which the thumb had *the leading part*. For although the spasm *began* in that digit, it went up the arm, and at length probably all over the body.

Besides, since the movements of the thumb and fingers could scarcely be developed for any useful purpose without fixation of the wrist (and of parts further and further in automaticity according to the force required), we should, *a priori*, be sure that the centre discharged, although it might represent movements in which the thumb had the leading part, must represent also certain other movements of the forearm, upper arm, &c., which serve subordinately. These remarks have partly anticipated the next topic—the March of the spasm.

After noting the part in which the fit begins, we have to observe how the spasm spreads (the "march of the fit"), and this for two purposes. We have not only to learn *how much* of the body is ultimately involved by the spasm, but also to note the *order* in which the several parts involved

* See Medical Mirror, September, 1869.

* It is supposed that in the part which is occasionally discharged the grey matter is highly unstable. This, indeed, seems to me to be a truism; the difficulty is to discover the *pathological process* by which that instability results. In the cases I shall mention later on it has been *associated with* tumour; the tumour does not discharge, but in some way it leads to changes involving instability of grey matter. My speculation is that, speaking in chemical language, the highly unstable grey matter of disease remains of the same Constitution as the comparatively stable grey matter of health, but that it is of a different Composition; and a further speculation is that the phosphorus ingredient is replaced by its congener nitrogen—that the nervous matter is more nitrogenised, and therefore more explosive. If this be so, we see that although the nutrition of grey matter is carried on abnormally in cases of convulsion, chorea, &c., we cannot say without much qualification that its nutrition is *defective*. The supposed therapeutical value in nervous affections of the other member of the group of triads (arsenic) is significant.

† Perhaps it may be well here to mention again that the word "voluntary" is used for a part like the hand, which has the greater number of different movements and the greater number of different intervals of movements, and that the word "automatic" is used for a part like the chest, which has the greater number of nearly similar movements and the greater number of nearly equal intervals. The hand is a more "voluntary" part than either the cheek (or articulatory organs altogether) or the leg. Indeed, the hand is the most important part of the body from any point of view. Hence the significance of the fact that in disease of the highest centres it usually suffers first and most.

are affected. For example, we have not only to report of a case that the spasm "affected the whole of one side of the body," but also that "the spasm began in the hand, spread up the arm, next took the face, and then passed *down* the leg." We have to note not only the range of a fit, but the *order* of development of movements one after another in that range. Or, speaking now of the nerve-centres, we have to study convulsion not only to learn what movements are represented in a particular nervous centre (anatomical localisation), but also to learn the particular order in which those movements are therein represented (physiological localisation).

As already remarked, the movements first developed in a fit probably represent those which take the lead; those next developed are, we may suppose, the subordinately associated movements. Let me illustrate by a healthy movement. When we grasp strongly, although the flexors take the lead the extensors must be in subordinate, and yet in associated action, or the grasp would not be vigorous; and the more strongly the hand is used, the farther up the arm does the movement spread. The observation therefore of the order of development of spasm will enable us, it is reasonable to hope, to determine the association of leading with subordinate movements. For example, if a fit begins in the thumb and index-finger, there will probably* be developed as the spasm spreads that series of movements which in health serves subordinately when the thumb and index-finger are used. Of course we can only make very rough observations, as in a convulsion a great number of movements are developed all at once.

It is to be observed that, just as degrees of hemiplegia are compound degrees, so the order of development of spasm is a compound order. For example, when the fit begins in the hand, the spasm does not leave the hand when it involves the rest of the arm. Two things occur: the spasm of the hand becomes more powerful, and the spasm spreads up the arm. This compound order—as are degrees of hemiplegia (*ante*, p. 84)—is roughly in accordance with the order of development of movements in increasing strains, as in lifting things of different weight (in what is technically called "effort"). It is important to note this compound order, especially when we consider that it implies that increasing discharge of a centre has not only the effect of intensifying movement, but also the effect of increasing the range of movement. It has an important bearing on the method of mental operations. For brevity and clearness, we shall, however, in what follows, speak of the spreading of spasm as if it were simple.

To show, further, the importance of noting sequence as well as range, I would mention that there are two varieties of fits in each of which, so far as I can learn, the same muscles are involved, but in each they are involved in a different order. The range is the same; the sequence is different. Thus one man's fits begin in his hand, go up his arm and down his leg; another man's begin in his foot, go up his leg and down his arm. But, though the same muscles are in action in each of the two fits, the fact that parts of both limbs are involved in different order and probably in very different degrees, renders the inference irresistible that the two fits depend on discharge of two different centres. For the nervous centres do not represent muscles, but very complex movements, in each of which many muscles serve. In each of the two centres discharged the *very same muscles* are represented in two different orders of movements. In one there are represented movements in which the arm leads and the leg is subordinate; in the other, movements in which the leg leads and the arm is subordinate. The very same notes are made up into two different tunes; in chemical metaphor, the fits are isomeric.†

My impression is, that the face is differently affected according as the spasm *begins* there and then goes to the arm, or comes there after the arm has been first seized. In the former case the spasm, I believe, begins in the mouth (both sides of the lips, or in the cheek near the angle of the mouth), and spreads all over the face. When the spasm begins in the hand, I believe the orbicularis palpebrarum is the part of the face first in spasm. If the order be as I suppose, the muscles of the face will be represented in movements of different orders, and therefore in several parts of the nervous system.

Thus, then, the three fits may be looked upon as experimental stimulations, each of some different part in the region of the corpus striatum, and as showing us (1) what movements have the leading representation in each part; (2) the movements which are sequent and subordinate to those having the leading representation. It is freely granted that no definite results have as yet been obtained on the second point. Very few cases have been carefully observed, very few autopsies indeed have been obtained on cases which *have been* observed carefully; and, lastly, as I shall point out very prominently later on, there are complications which impede our attempt to draw exact conclusions. It is for the very reason that so little has been done that I urge the careful investigation of these seizures.

(To be continued.)

* In the case mentioned we had no opportunity of noting the march of the spasm.

† I have recently had two patients under my care whose fits begin in the foot. When the spasm does get to the arm in these cases, it begins in the fingers and goes up the limb; but even in these cases the centre discharged must be a different one from that discharged when the fit begins first of all in the hand.

CASE OF

SEVERE COMPOUND DISLOCATION OF THE ANKLE-JOINT.

BY HERBERT COOPER, M.R.C.S.

I THINK the following case of compound dislocation of the ankle-joint worth recording:—

On the 23rd of February, 1870, I was summoned to see a gentleman, Mr. H. H——, who had met with an accident, his horse having stumbled over a rolling stone and fallen with him. I found my patient sitting in a chair, with his right leg resting on another, and his right foot twisted inwards nearly at right angles with the axis of the leg. Two inches of the tibia and fibula, perfectly denuded of muscle, protruded out between the top of his boot and the under-side of his gaiter. He had on at the time of the accident a pair of stout walking boots and stiff leather gaiters. At first I thought it was a case for immediate amputation. I administered a strong glass of brandy-and-water, sent for my assistant and the necessary instruments, and got the patient laid upon the table, so that when they arrived I at once put him under the influence of chloroform, cut off his boot and removed his gaiter. On examination, I found a wound on the outside of the ankle, about two inches wide, and through which the bones were protruding. The under sides of the tibia and fibula were covered with mud. There is very little doubt that the patient had endeavoured to step upon his leg, for on inquiry I had ascertained that the horse had rolled upon him, had struggled to get up and had fallen the second time, and that when Mr. H—— was found he was some distance from the animal, endeavouring to stand.

I carefully removed all grit, &c., then used great traction and succeeded in partially reducing the tibia; but, to my annoyance, the skin at the lower edge of the wound slipped up between the bones and prevented my returning the fibula. Here I was somewhat baffled, for the question immediately suggested itself to me, Was it my duty to saw off the end of the fibula, or to make a rectangular flap in already much injured tissues? I preferred the former expedient, and sawed off the external malleolus, and then, with a little more traction, landed the tibia in its proper position. I dressed the wound with simple ointment, and, having tied the leg in a pillow, had my patient removed on a stretcher to the house of his friend, which, fortunately for us both, was adjoining my own, his own residence being seven or eight miles distant.

In three or four days' time I put the leg in a swing box, and all went on prosperously under treatment of poultices and opiates till about the tenth day, when phlegmonous erysipelas set in and made rapid strides up the leg. I then felt it had become a case for consultation, and, at the request of the patient and his family, I called in Mr. Gore, of Bath, who quite agreed with me that a free incision was necessary. This was made over the tibia, about four inches in length. A considerable discharge of pus ensued and lasted some days, and the inflammation abated. On the

12th of March I was obliged to make another incision, inside the ankle, for the freer exit of pus in that position. On the 20th I applied a loose bandage, still keeping on with the poulticing; but this I was obliged to leave off on the 23rd, for the lymphatics became affected and the glands of the groin began to swell. I used iodine and tonic treatment, and did not attempt to bandage again until May 1st. I then had an apparatus swung from the ceiling, so that the patient could raise his body from the bed, and more conveniently assist himself in his various necessities.

On May 21st I had him removed to a large room, and all went on well for a week. Then the most anxious time arrived. I was called on the 27th, early in the morning, and found him shivering all over and his teeth chattering, the surface of his body quite cold and purple, and the pulse almost imperceptible. I immediately gave him a pint of champagne with a little brandy, and repeated this dose three times during the day, and left off the bandaging, applying only poultices. In the evening he was better and the rigors ceased, but on the following day they again threatened, and I telegraphed to Mr. Gore for a second consultation. The treatment was not altered, and for some days the champagne was continued.

From this time the patient gradually but very slowly recovered, and on the 20th of June he was able to sit up in an arm-chair, which was a very great relief to him, having remained on his back for nearly four months; and on the 14th of July he was removed to his father's residence, about a mile distant, where he daily improved, riding out frequently in a Bath chair.

On the 3rd of September following Mr. H—— went to his own home, seven miles distant, with only a small wound, little larger than a shilling, on the inner side of the ankle, the external opening and the artificial one over the tibia having healed about a month previously. For a very long time this wound was a cause of great trouble and anxiety to me. Although my patient was able to get about his farm in a Bath chair or in a dog-cart, and to superintend his various duties, yet there continued a nasty discharge, which evidently resulted from the irritation caused by a piece of necrosed bone. In November a small piece of bone, about the size of a split pea, came away from the internal malleolus, and the wound nearly healed. Two months afterwards another minute scrap of bone threw itself off; and at last, in February, a year after the occurrence of the accident, the wound healed, and the leg became as whole and perfect as it could be under the circumstances. During the winter Mr. H—— suffered much from a severe attack of bronchitis, which confined him to the house and prevented his getting about for some time; however, last summer he walked a great deal and rode on horseback.

The great point for consideration seems to me to be, Would it be advisable under similar conditions to pursue the same course of treatment that I adopted, or to resort to immediate amputation? I must say that I cannot come to a very firm conclusion myself, if I weigh the chances and risks that I have gone through against the speedy recovery from amputation; and though in the present case the result has been a highly satisfactory one, yet if there had been a less healthy subject to deal with, the dangers and complications must have been considerably greater, and I much fear that the termination of the case would have proved fatal to the patient as well as a source of unceasing regret to the medical man. At the present time Mr. H—— can walk ten miles with ease, can ride well and hunt, and the most satisfactory part of his case is, that he has partial use of his ankle-joint and no shortening of the leg.

Wootton Bassett, Wilts.

THE TREATMENT OF SMALL-POX BY VACCINATION.

By MATTHEW TAYLOR, M.B.,

LATE ASSISTANT MEDICAL OFFICER AT THE HAMPSTEAD HOSPITAL.

So much has been written upon this subject already that little room is left for anyone to make original observations; still, as the subject has been opened up by the recent articles of Dr. Grieve and Mr. Furley, *pro* and *con.*, and as further discussion and investigation have been invited by Mr. Furley in his article in THE LANCET for August 10th, it may be useful to record what little experience I have had in vaccinating during the progress of variola.

While assistant medical officer at Hampstead Hospital, on the publication of Mr. Furley's letters in the newspapers, Dr. Grieve, Mr. Bland, and myself made a series of experiments, which Dr. Grieve has not referred to in his article in your pages, but with precisely similar results. As far as my memory serves me, we vaccinated four cases, two of which were unvaccinated and two vaccinated. Of the two vaccinated cases both were mild cases and both aborted, but not sooner than in all probability they would have done if left to nature. Of the two unvaccinated cases, one died two days after—I don't mean to insinuate from the vaccine lymph having been used; but certainly it did nothing to modify the virulence of the attack. The other case was most interesting, as in it the vaccinia and variola ran their course side by side, without the one seeming in the slightest degree to affect the other. The child was a little gipsy girl of about eight years of age, and was vaccinated in the vesicular stage of the small-pox immediately on her admission. She had a very severe attack, the disease running a quite unmodified course, though the vaccine vesicles could be distinctly seen on the arm.

Such were the results of the first series of experiments—certainly not such as to encourage us in its continuance; yet, notwithstanding, I was much pleased to see that another series of experiments had been instituted, though evidently with no better result. Nevertheless, I find that Mr. Furley still maintains his ground and contends that vaccination, during the course of the disease, has a curative effect. It seems to me that Mr. Furley makes a grand mistake in the very outset, as by his own analysis of his cases the great majority on which he experimented were vaccinated cases. Now, anyone at all conversant with small-pox knows that in perhaps 95 per cent. of vaccinated cases the disease does not run its natural course, but is modified and may abort at any stage; consequently, in experimenting upon vaccinated cases, one is not experimenting on small-pox, but on a modified disease—modified to a greater or less extent according to the number and nature of the vaccine cicatrices, and the results, in a statistical point of view, are quite worthless. Who can say that the disease would not have aborted earlier in these vaccinated cases if left alone? Cases of small-pox, pure and simple, unmodified and unvaccinated, are the only proper cases for experiment, and the only ones which give reliable data. Now, striking out all vaccinated cases, and referring only to Mr. Furley's unvaccinated cases, I would ask—Is his percentage of deaths in these cases larger or smaller than the average of such cases in the London small-pox hospitals during the epidemic? If there is a marked difference in the percentage of deaths, then I will believe there is something in the vaccination theory. If one thing more than another was impressed upon me during my residence in Hampstead Hospital it was the value of vaccination and revaccination as preventives to small-pox, but not as curative agents. Mr. Furley seems to scout the opinion of Mr. Marson and others, that a person may be vaccinated—say on Thursday—and yet, if delayed twelve hours, it would be too late. I have seldom, in my experience of small-pox (which extends to some 1200 cases), found Mr. Marson very far wrong in his deductions. He has seen too many cases, and is too accurate an observer for that; and I have seen sufficient to justify me in supporting the opinion of Mr. Marson, Dr. Grieve, and others, that vaccination may be of use to-day, too late to-morrow; and I dare say most medical men will be ready to corroborate that opinion. If the effect of introducing vaccine lymph were instantaneous, then Mr. Furley might be right. But anyone who has given the subject careful consideration knows that the preventive action of the vaccine virus does not come into operation till the constitutional effect is produced, or, in other words, till the maturation of the vesicle, which occurs in nine days. Now it has been demonstrated clearly that the period of incubation in small-pox, from the time of exposure to the virus till the appearance of the eruption, is, as nearly as possible, fourteen days. The opinion held by Mr. Marson, Dr. Grieve, and others, and in which, from my own experience, I concur, is that if a person be vaccinated so that the vesicles arrive at maturation before the small-pox eruption appears, he is safe; if the small-pox eruption

appears first, the chances are that it will run its course unmodified by the vaccinia. Suppose A. B., an unvaccinated person, is exposed to the variolous virus on Monday, the rash will, in all probability, appear on the following Sunday week. If he is vaccinated on the Tuesday, he is safe; or the Wednesday, Thursday, or even up to the Friday; but if delayed till the following Monday, it is quite useless, and might as well not be done; for, in nine cases out of ten, the disease will run its course unaffected by the vaccination. If the opinion I have expressed be correct—viz., that vaccination is of no use until the maturation of the vesicle—then why vaccinate during the appearance of small-pox eruption? Before the nine days necessary for its maturation have elapsed the disease will either have passed the crisis or have terminated fatally.

As to the theories Mr. Furley has put forward respecting the "pabulum" and the blood, I say nothing further than that it fails to account for many of the phenomena observable in small-pox. However, it is a wide field for speculation, and some further light may be educed from those who have made the action of specific poisons on the system a special study. The conclusion to which I come, from the experiments I have mentioned, confirmed by the further experiments of Dr. Grieve, is, that revaccination or vaccination after the appearance of the rash is powerless to check the disease, if not injurious; but let me add my humble testimony to the value of vaccination and revaccination as preventives.

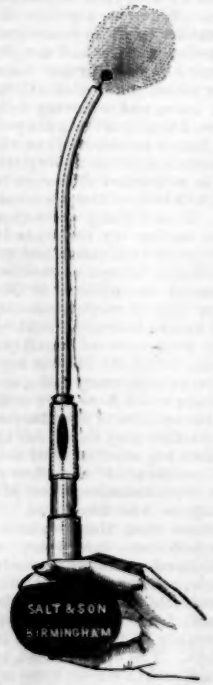
Grenada, West Indies, 10th Sept. 1872.

NEW INSUFFLATOR FOR TREATING DISEASES OF THE UTERUS, ETC.

BY JOHN CLAY,

OBSTETRIC SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

HAVING used the insufflator (see THE LANCET, Nov. 30th, 1872) in a number of cases of diseases of the uterus, and proved its thorough efficiency in every respect, I have had an engraving of the instrument made, which I here introduce, together with a description of the mode of using the instrument.



The instrument is made of the same length and shape as Simpson's uterine sound, and after the model of the "alum puff" used for insufflating the larynx; but instead of having an open end, which would render it liable to be plugged with mucus during its introduction into the uterus, and which would prevent the escape of the powder, the instrument here depicted is provided with a movable bulbous head, which closes the end of the tube. The pressure of the thumb on the rubber ball opens the end of the tube and ejects the powder at the same time, as shown by the engraving. When the pressure of the thumb is removed from the ball, an internal spiral spring retracts the bulbous head, and thus facilitates the withdrawal of the instrument.

The powder is placed in the aperture seen at the lower end of the tube, near to the rubber ball, and is secured by means of a sliding ferule not shown in the engraving.

Messrs. Salt and Sons, Birmingham, surgical instrument manufacturers, have been very successful in producing a neat and efficient instrument.

Birmingham.

A Mirror OF HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

ACUTE PLEURISY WITH EFFUSION; PARACENTESIS THORACIS; RECOVERY.

(Under the care of Dr. HARRIS.)

THE treatment of acute pleurisy with effusion as illustrated in the following case, although largely adopted by continental physicians, and more particularly by Küssmaul, Bartels, and Ziemssen, has, as yet, been practised by very few in England. Much may be said for and against it; but it would appear that the weight of evidence is in its favour, especially in cases where there are no signs of commencing absorption of the fluid by the natural process. It is certain that the longer the lung remains compressed, the chances of re-expansion are diminished. Not only does the lymph on the pleura become firmer, but the alveoli of the lung are also liable to become agglutinated and thus destroyed. It is also well known that in some cases where there has previously been no indication of the commencement of the absorption of the fluid, the removal of a small quantity will start the process, which may then go on with even more than ordinary rapidity. Clinical experience has also shown that the evil effects of the admission of air into the pleural sac have been greatly exaggerated. We must again insist on the value of Woillez's cyrtometer for estimating the degree of unilateral enlargment of the chest, for by its aid we acquire a knowledge of the size and shape of an ideal section of the two halves of the thorax.

For the following notes we are indebted to Dr. de Havilland Hall, house-physician.

Daniel D——, aged twenty, a butcher, was admitted into John ward on August 19th, 1872, when the following notes were taken:—He is a well-nourished man, lies on his left side, and has pain in that side on breathing. Skin moist; temperature 101°; pulse 108, regular; specific gravity of urine 1038, no albumen, no sugar; respiration 30. There is absolute dulness over left chest, even above the clavicle, transgressing the median line; entire loss of vocal fremitus and resonance; only very distant breathing, probably conducted from the other side, to be heard. Bulging of the left side very marked posteriorly. On the right side is puerile breathing; good resonance. The heart's apex is to be felt beating in epigastrium; sounds heard feebly in the normal position of apex, and heard loudest on right side about the level of the fourth intercostal space; sounds clear. Patient states that he has always enjoyed good health. The illness began about three weeks ago with pain in the abdomen and left side. About a fortnight ago he had "cold shivers," but he kept at work till the 17th inst. Has not had much cough. Ordered milk diet with beef-tea, and five grains of iodide of potassium every four hours. Tincture of iodine to be painted over the affected side.

Aug. 21st.—Pulse 100; respiration 32; temperature 101·1°. Had a restless night; bowels acted very freely.

22nd.—Pulse 112; temperature 100·8°. No return of resonance; face becoming slightly dusky. Paracentesis thoracis performed, and seventy ounces of straw-coloured serum let out.

23rd.—Pulse 100. Passed a good night. Dulness as absolute as before paracentesis, and transgressing the median line, though after the tapping there was resonance over the sternum. On taking a measurement of the chest with a cyrtometer, the area of both sides is found to be diminished, especially the left; temperature 100·2°.

31st.—For the past eight days he has remained in much the same condition; temperature varying from 99·4° to 101·2°, and the pulse from 92 to 108. To-day his temperature is 102°, and pulse 96. Absolute dulness over the left

side, and the cyrtometer shows that the area is increased again. Paracentesis thoracis performed, five pints of clear straw-coloured fluid, sp. gr. 1020, let out. After this operation, as well as after the former one, the opening was immediately closed by a pad of lint.

Sept. 1st.—Pulse 92; temperature 100·2°. Slight pain in left chest; very slight boxy resonance from left apex to second rib.

3rd.—Pulse 88; temperature 100°. Feeble breathing audible over the left chest anteriorly. Dulness hardly reaches to the median line now. No friction sound to be heard anywhere. Heart not to be felt beating over the chest.

5th.—Pulse 80; temperature 99·8°. Resonance improved under left clavicle, slight resonance in interscapular region, feeble breathing to be heard all over the back.

12th.—Pulse 60, small; temperature 99·2°. Improved resonance down to third rib, with fair vesicular breathing. Over the back breathing is heard more distinctly, resonance increased above spine of scapula and in interscapular region. Distinct friction sound two inches below nipple.

14th.—Very loud friction sound slightly heard at angle of scapula.

19th.—Friction sound audible all over front of chest.

24th.—Temperature 98·8°. Improved resonance under clavicle; loud friction sound.

28th.—Friction sound not so loud.

Oct. 2nd.—Very slight friction sound; feeble breathing all over the left chest.

8th.—Out of bed for the first time yesterday.

10th.—Dull below third rib.

17th.—Friction sound quite gone; improved resonance in interscapular region.

30th.—Slight improvement of resonance.

On Nov. 7th the patient left the hospital at his own request, as he had an opportunity of going into the country. His chest on the left side was resonant down to the third rib, above the spine of the scapula, and in the interscapular region, the only part remaining dull being the infra-axillary region. Fair vesicular breathing all over the resonant region.

From the time of the first tapping till the beginning of October he had no medicine, with the exception of an occasional purgative. From October till his discharge he had two grains of iodide of potassium in some camphor mixture three times a day. He had full meat diet, a pint of porter, and a pint of milk a day.

SEAMEN'S HOSPITAL, GREENWICH.

TWO CASES OF COMPOUND DEPRESSED FRACTURE OF VAULT OF CRANIUM, TREATED, IN THE ABSENCE OF GRAVE SYMPTOMS, WITHOUT OPERATION.

(Under the care of Mr. W. JOHNSON SMITH.)

IN commenting at p. 11 on the treatment of compound depressed fracture of the skull without symptoms, we pointed out that the matter was one of the vexed questions of surgery; some surgeons advising operative interference, while others as warmly advocate non-interference. It was the opinion of Sir B. Brodie and Sir A. Cooper that all such cases should be operated on, and the depressed bone elevated or removed to prevent subsequent intracranial mischief. To this rule, however, clinical experience has shown that exceptions may be made. If a compound depressed fracture of the skull be not seen for some days after the receipt of the injury, and no symptoms be then present, as in the second of the subjoined cases, it seems to be the best practice to abstain from operating, as the patient may recover without any further trouble. In the first case there is a point which is not sufficiently noticed in works on surgery, and yet one which must have been frequently observed—viz., the rapid healing of wounds after the subsidence of an attack of erysipelas.

CASE 1.—Alfred T——, aged eight years, was admitted into the hospital on August 8th, 1872, shortly after a fall from a height of about ten feet. He had lost much blood before admission, and was in a state of combined shock and concussion, but could be readily roused. Over the inner portion of the right parietal bone, and near the coronal suture, was a large, irregularly-shaped wound of the scalp, with jagged edges, which were widely separate, and exposing a considerable portion of bare bone and a well-marked, depressed fracture, running from behind forwards and inwards. At the upper portion of the left temporal region, and extending horizontally from before backwards, was a deep wound, which, however, at no part of its extent involved the whole thickness of the scalp. At the time of admission there was slight ecchymosis of upper eyelid on the right side. This increased very much in the course of two hours, and completely closed the eye; no subconjunctival hæmorrhage on this side. In the course of the night the patient became quite sensible, but was restless and very irritable. Vomited about two hours after admission, and again early on the following morning. The wound on the left side was closed by sutures, and wet compresses were applied over both wounds and across the forehead.

August 9th.—Was quite sensible during the whole of the day, but still remained very restless, turning frequently from side to side, and keeping all the limbs flexed. No return of vomiting. Temperature 99° F.; pulse 104.

10th.—Slept very much during the day, but was quite sensible when roused; was much less irritable and restless; right eyelids still much swollen. Temperature 99·2°; pulse 112.

The patient then progressed very favourably, and without presenting any symptoms of cerebral mischief. The superficial wound on the left side speedily closed; but in that on the right side, which was associated with the fracture, there was at first much suppuration, which diminished in the course of a week, but did not entirely cease until the second week in September, when a large granulating surface had closed by cicatrisation, and the bare bone about the line of fracture had been detached by exfoliation and removed in numerous small pieces. On Sept. 12th, when the wound was almost completely closed, the boy had a sharp attack of erysipelas of the face and scalp; but after this had passed off he rapidly improved, and on Oct. 5th was discharged as cured, both wounds being quite closed, the situation of that on the right side being marked by a large, dense, and depressed cicatrix. The boy has frequently attended as an out-patient, according to instructions; but up to the present time (Jan. 8th) has shown no bad symptoms either of a general or local character.

CASE 2.—William R——, aged thirty-two, a muscular and apparently healthy sailor, was admitted on Nov. 6th, 1872, with injuries to head and left shoulder received three days previously when he had been thrown down on deck by a heavy sea, his head coming in contact with a large iron bolt. The injury to the shoulder, though merely a contusion accompanied with pain over the deltoid and partial loss of power in this muscle, was the chief cause of the patient's application for admission, and very little attention seemed to have been paid by him to a large wound on the left side of the head, which was covered by a thick layer of coagulated blood, on the removal of which the following condition was presented:—On the left side of cranium, three inches and three-quarters above the left pinna, was a scalp wound extending directly from before backwards for a distance of two inches and a half. The edges had retracted considerably, and were inverted; the whole thickness of the scalp had been involved, and at the bottom of the wound was a considerable extent of bone, white and perfectly bare. This exposed portion of bone was found to be depressed to the extent of about one quarter of an inch below the surface of a jagged margin of bone, which extended from above downwards at the anterior extremity of the scalp-wound, the line of fracture curving downwards and backwards under the lower flap of the wound, and making its appearance again as a slight fissure near the posterior extremity of the wound. The depressed and bare portion of bone was also marked at the middle by a simple depression of the outer table, resembling in size and form an impression made on soft material by the bowl of a teaspoon. The fractured portions were firmly fixed, and no mobility could be made out on pressure with a director. The patient stated that he had not suffered from headache since the day of the accident, that he had not had any vomiting, and that his health had not been disturbed.

The patient was ordered to keep to his bed and to take low diet. Water dressing was applied to the wound, and the portions of scalp immediately around the edges were shaved. The raw surfaces, which at first were dry and

showed no tendency to healthy reaction, speedily improved in appearance, and became covered by rapidly cicatrising granulations. The wound speedily contracted; and, after the removal of three large portions of necrosed bone on Dec. 9th, closed completely. He was allowed to get up on Dec. 12th; and on the 30th day of the month was discharged as cured.

During the whole period that the patient was in the hospital no bad subjective symptom of any kind was noted. He frequently complained of being kept in bed for what he regarded as a trivial injury. The temperature was never higher than 99·4°, and on four days only was above 99°. The pulse, taken whilst the patient was lying down, varied between 72 and 88. During the first week of the patient's stay in the hospital there was great difference in the frequency of the pulse in the positions of lying down and sitting up in bed. In the former position it was about 88; in the latter 115. Shortly before his discharge there was a difference only of 16 beats. No change was ever observed in the action and relative condition of the pupils.

ST. MARY'S HOSPITAL, MANCHESTER.

ELEVEN CASES OF OVARIOTOMY.

(Under the care of Dr. LLOYD ROBERTS.)

MR. RUNCORN, house-surgeon, has furnished us with the notes of eleven cases of ovariotomy, four of which we publish this week; the remainder shall appear in due course.

CASE 1. *Unilocular ovarian tumour, weighing 51¼ lb.; ovariotomy; death.*—Mary L——, aged thirty-four, was sent by Dr. Nicholson, of Oldham, to St. Mary's Hospital on the 12th of January, 1872. She had been married seven years; no pregnancy; menstruation regular. She stated that the abdomen began to enlarge eleven years ago, and that she had since been twice tapped; on the latter of these occasions she suffered from severe bronchitis. She had been losing flesh for some time. On admission the girth at umbilicus was forty-four inches. Percussion dull all over the abdomen, except very low down in the flanks. The uterus was movable, and measured two inches and three-quarters. Complained of frequent severe pain immediately above the pubes.

Jan. 24th.—The patient having been anæsthetised by bichloride of methylene, the abdomen was opened by an incision three inches long. The exposed tumour was non-adherent and cystic; the contents were removed by a syphon trocar, and the cyst extracted. It proved to be the right ovary. The narrow, thin pedicle, which was three inches long, was secured by clamp, the abdominal wound closed by silk sutures, and antiseptic dressing and plaster applied.—11 P.M.: Has slept two hours. Pulse 88; temperature 99°.

25th (first day after operation).— Had a good night; slept between two and three hours. Has taken iced milk. Pulse and temperature same as last night.

27th (third day).—Patient had been progressing favourably until this morning, when she was attacked with acute asthenic bronchitis. Temperature 101°; pulse 120. Ordered a stimulating expectorant mixture, brandy, milk, and beef-tea, and to have sinapisms applied to the chest. In the evening the chest symptoms were somewhat relieved.

28th (fourth day).—Bowels had been moved three times during the night. Chest symptoms much relieved. Temperature 100° F.; pulse 115. Wound examined; sutures removed; union had taken place; no abdominal pain or distension; passes urine spontaneously; continues to take and enjoy the milk and brandy.

30th (sixth day).—She had continued to improve until this morning, when there was a return of the chest symptoms, coarse mucous râles being universally audible. Temperature 104° F.; pulse 140.

Feb. 2nd (ninth day).—Bronchitic symptoms continued unabated till this morning, when she died without symptoms of abdominal mischief.

CASE 2. *Multilocular ovarian tumour weighing 18¾ lb.; ovariotomy; recovery.*— Mary T——, single, aged thirty, sent by Dr. Corns, of Oldham, was admitted January 15th, 1872. Menstruation had been regular up to the last four months, when it ceased. Abdomen began to enlarge eighteen months ago. Has suffered occasional pain in the abdomen, increased at the menstrual periods. General health good. She has emaciated lately.

Feb. 9th.—The abdomen was opened by an incision three inches long, one large cyst in front emptied by a syphon trocar, and a second cyst about half the size was tapped through the former; a mass of cysts and fibrous structure then came into view, which was found too large to pass through the wound. The incision was extended two inches, and the tumour removed. The pedicle, which was short and thick, but not broad, was attached to the right side, and secured by a clamp, and the abdominal wound brought together and secured, as in the former case. No abdominal bandage was used.—At 10 P.M. her pulse was 105; had slept three hours; had taken milk and ice from the first; no vomiting. Pulse never rose higher than 110. On the third day the sutures were removed; wound united. On the tenth day the clamp was cut away, and she was convalescent on the fourteenth day.

The tumour is composed of two large cysts and a number of smaller ones aggregated together; the fluid in the cysts is gelatinous and dark-coloured.

CASE 3. *Malignant tumour of the right ovary; ovariotomy; death.*—Frances S——, aged twenty-one, admitted on the 3rd of January, 1872. Had been married two years; sterile; menstruation scanty up to eight months ago, when it ceased. Abdomen began to enlarge on the right side fifteen months ago. On admission, a solid movable tumour was situated between the right iliac fossa and a little to the left of the umbilicus. Uterus normal. The patient was pale, haggard, and emaciated. Pulse 100. Complained of severe darting pain in the right iliac fossa.

Feb. 23rd.—The abdomen was opened by a small incision. There were slight adhesions between the tumour and the abdominal wall, which were separated by the hand. The incision extended two inches above the umbilicus. The tumour was drawn out of the abdomen, and a clamp applied with difficulty to a short, broad, fleshy pedicle. The tumour separated without hæmorrhage. Abdominal wound brought together in the usual way. Bichloride of methylene had been administered by the house-surgeon, who remarked that the pulse was lower than for some time before the operation.

24th.—Had slept a little during the night; had complained of hiccough and flatulence. Pulse 120.

25th.—Began yesterday afternoon to suffer from nausea and vomiting, which continued until this morning, when the patient died of shock.

On post-mortem examination of the abdomen, the only morbid appearance detected was slight sanguineous effusion into the peritoneal cavity. The tumour was hard and solid, weighing 9 lb. When cut into and examined microscopically, it presented all the characters of a malignant growth.

CASE 4. *Multilocular ovarian tumour weighing 18¼ lb.; ovariotomy; recovery.*—Emma P——, aged twenty-six, admitted in February, 1872. Had been married five years, and had borne three living children. Menstruation regular; abdominal enlargement began fifteen months ago on left side; had a severe attack of flooding seven months ago. Abdomen conical in shape, measured around umbilicus, 39 inches; from ensiform cartilage to pubis, 18 inches. Percussion tympanitic in both flanks, especially in the right, in epigastrium, and anterior part of both hypochondriac regions. Fluctuation distinct all over tumour, except a small portion on the left side, which is solid; distinct fluctuation in Douglas's space on the left side. Uterus measures three inches; movable.

Feb. 28th.—The abdomen was opened by a small incision, subsequently extended to within an inch of the umbilicus; slight parietal adhesions. A cyst emptied by syphon-trocar; a second smaller cyst tapped through the former. The remaining portion of the tumour, composed of fibrous stroma and small cysts, drawn through the wound and removed, the pedicle being secured by clamp. The abdominal wound brought together in the usual way.

Feb. 29th.—Vomited once; complained of a little abdominal pain; relieved by a morphia suppository. With these exceptions she had no unfavourable symptoms. For the first five days her diet consisted of iced milk; she was then allowed farinaceous puddings. The sutures were removed on the fourth day after operation, and the clamp detached on March 7th. The tumour was multilocular. The fluid in the cysts was viscid and dark-coloured.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JAN. 28TH, 1873.

T. B. CURLING, F.R.S., PRESIDENT, IN THE CHAIR.

A SECOND REPORT ON THE COMMUNICATION OF SYPHILIS IN THE PRACTICE OF VACCINATION.

BY JONATHAN HUTCHINSON, F.R.C.S.,
SENIOR SURGEON TO THE LONDON HOSPITAL.

THIS paper contains an account of two series of vaccination-syphilis (each series containing but a single case) which have come under Mr. Hutchinson's notice since his last communication on the subject in 1871. These two cases (forming the author's third and fourth series) are prefaced by a few remarks referring to cases published by others on the continent and at home; the author also re-asserts the great importance of making all such cases public. The latter part of the paper is occupied with general conclusions and recommendations drawn from a consideration of all the cases which have come under Mr. Hutchinson's notice.

THIRD SERIES. — *Case.* — This patient was a respectable small tradesman, forty-six years old, who came under Mr. Hutchinson's care at Moorfields Ophthalmic Hospital with double iritis. Examination disclosed the presence of a copious dusky rash and symmetrical ulcers in the tonsils. The ordinary questions as to syphilis were denied, and careful inspection of the genitals gave an entirely negative result. On one arm, however, two or three scabbed ulcers were found, as large as shillings, with dusky indurated borders; and there was an indolent bubo in the corresponding armpit. He said that the sores on the arm had broken out at the seat of the vaccination-punctures. He had been vaccinated three months before admission; the punctures took, and behaved as usual; but when just healed over, a month after the operation, they inflamed and broke out into sores. About a fortnight later (six weeks after vaccination) the rash appeared, and at the end of another month the iritis set in. The nature of the disease had not hitherto been diagnosed, and no specific treatment had been used; under the use of mercury both iritis and rash were cured. This man was seen by many medical men at the hospital during the two or three months of his attendance, and there could be no shadow of doubt about the nature of his malady. Although his vaccinator had not diagnosed this man's case, he had had much trouble with the arm-sores, which from his subsequent account would appear to have been at one time almost phagedenic. Besides the patient, about twelve others were vaccinated from the same baby, three of them being the patient's children, young adults; in these three no ill results have occurred; the remaining cases have not been pursued further (for prudential reasons detailed in the paper), but the vaccinator believes that none of them had any trouble, save one or two in whom a little difficulty occurred in the healing of the vaccination spots. The vaccinator said that the baby used appeared in excellent health at the time. When seen by Mr. Hutchinson at eight months old it was fat and well grown, the only sign of inherited syphilis being the markedly sunken bridge of the nose—a symptom to which the author attaches considerable importance, and from which he predicts with some confidence the future occurrence of confirmatory events. The child was the third, and the only living one, the first two having died in infancy. In favour of this man's syphilis having been gained during vaccination we have the occurrence of induration &c. in the vaccination-scars at exactly the interval which is known from former cases to elapse between inoculation with syphilitic virus and formation of the chancre, the occurrence of axillary indolent bubo, the eruption and other secondary symptoms following the arm-sores at the proper period, and, lastly, the total absence of any trace of chancre elsewhere and the extreme improbability of syphilitic inoculation of the vaccine sores after the vaccination. Against this conclusion there are only the negative facts afforded by the apparent immunity (which may, however, yet be disproved) of the other persons vaccinated, and the slight evidence of syphilis in the vaccinifer; the latter being what is to be expected, since no one would think of vaccinating from an obviously syphilitic child.

FOURTH SERIES.—*Case.*—A lady about forty-five, who came to Mr. Hutchinson as a private patient in December, 1872, for a vascular growth from the urethra. During examination the remains of a copious, dusky, evidently syphilitic rash were found. On inquiry, she stated that she had been very ill after vaccination, and had had a severe rash and inflammation of one eye. Further examination showed the presence of a dusky scar at the seat of one of the vaccination-punctures, very different indeed from a normal vaccine cicatrix; synechiæ were also found in the left eye, proving past iritis. She was vaccinated in May, 1871, by four punctures, none of which took; just a month later one of them inflamed, and became a hard-edged ulcer, lasting three months. Two or three weeks later (about two months after vaccination) the rash appeared copiously, and she fell into ill-health. From the vaccination in May to the early part of September, she had no specific treatment, which probably accounts for the severity of the rash, &c. After this she took small doses of iodide of potassium and bichloride of mercury, under another practitioner, for nine months, when she ceased all treatment, and went for two months to the sea-side. At the end of this period her left eye inflamed (iritis), and the rash, which had been nearly well, relapsed. For the iritis she was treated at Moorfields Hospital by a colleague of Mr. Hutchinson, its cause and origin being suspected, but not followed out. It was several months after her admission to the hospital that she came under the author's care for a complaint having no connexion with the syphilis. She was vaccinated from a baby's arm, and at the same time her two grown-up daughters. A number of others had previously been vaccinated from the same child, but these have not been traced. The two daughters, however, appear to have escaped all contamination. The baby is said by the vaccinator and its own mother to have looked quite well at the time. As soon as dentition began, however, it had some very troublesome sores about the anus (? condylomata), for which it was under treatment three months at a dispensary. It is the third child. All are living. The eldest, a boy about six or seven years old, shows no signs of inherited taint; the second, a girl of five, now has a large forehead, and she had exactly the same sores about the anus and at the same age as the vaccinifer; the vaccinifer itself also now has a large forehead. The author calls attention to the fact that these two cases of vaccination-syphilis were not, as were the first and second series, sent to him because he was known to be interested in the subject, both of them having occurred in the ordinary course of practice. Several cases of supposed syphilis from this cause have been sent to him, but the diagnosis in these was not confirmed.

Conclusions and general remarks based on the four series of cases.—These are summed up chiefly as answers to certain questions. The author first asks: What are we to infer from the circumstance that when syphilis is conveyed in the practice of vaccination it does not affect all those vaccinated from the tainted source? And he answers: We must believe that the specific poison of syphilis is either not contained in the vaccine lymph at all, or is not equally diffused through it. Thus, in the first series of cases, two out of twelve vaccinated escaped syphilis; in the second series, out of about twenty-six vaccinated more than half escaped; while in the third and fourth series only one out of at least twelve vaccinated from each vaccinifer is known to have been syphilised. It will be borne in mind, however, that the last two series have purposely not been followed up exhaustively, and that the proportion tainted with syphilis is not improbably greater than appears at present. Again, from the evidence of these series of cases there is no doubt that we may vaccinate from a tainted vaccinifer without conveying syphilis; and, on the other hand, it is possible to convey syphilis either with or without the production of a normal vaccine vesicle. Vaccination from a child evidently syphilitic is known to have been done inadvertently several times without bad result, and probably it has often occurred without being known. These points of clinical evidence make it highly probable that the syphilitic virus is not contained in the vaccine virus, but is derived from, or associated with, some cell-elements of the blood, and probably these need not be visibly red. This is confirmed by experimental evidence, for syphilis has been successfully produced by inoculating the blood of a patient in the secondary stage, and in the case referred to the dates

&c. agree closely with those observed in the author's series. Next, Need blood be used in vaccination in order to convey syphilis? The author thinks that probably it is enough if the material used has been mixed with colourless exudation from the blood as occurs when the vaccine vesicle is allowed to drain in order to furnish more lymph. This is confirmed by the fact that the vaccinators in the cases in question asserted that they always scrupulously avoided making the vesicle bleed; in none of the instances is there any history that the lymph was visibly bloody; while it is well known that many men of large experience do allow the vaccine vesicle to weep. According to this supposition, as soon as the first contents of the vesicle are exhausted the risk begins. Third: If the syphilitic virus and the vaccine virus be implanted at one and the same time, what will be the course of events? If the patient is susceptible of vaccination the vesicle goes through its usual phases and heals, and nothing more happens till the end of a month, when the scar indurates and the chancre forms. In some cases, however, the vaccination sore never heals, and in these the scab somewhat obscures the characters of the chancre.

Characters of the vaccination-chancre.—It begins as a little, red, firm, glossy tubercle, which gradually increases in size, and becomes harder. In about a fortnight it usually ulcerates, the sore giving off but very little discharge, and with a hard base and edges. If no mercury is given it may remain open several months; in one case it probably became almost phagedenic. Sometimes there is from the first a good deal of inflammatory effusion at the base of the sore, and much purulent secretion and scab on its surface; its specific characters may be thus quite hidden. These cases are generally in children.

Treatment of the vaccination-chancre.— Mr. Hutchinson feels no doubt that should a vaccination-scar take on the induration characteristic of a chancre, and should the other facts of the case corroborate the suspicion, it is the surgeon's duty without delay to commence the administration of mercury. The influence of mercury in retarding and greatly diminishing the severity of the primary and secondary symptoms was most marked in all those cases which came under care at an early period (sixth week), as in the first series. Indeed, in this series the eruption was so retarded as to induce scepticism in not a few minds as to the correctness of the diagnosis; several of them, however, from five to seven months after vaccination had undoubted, though mild, secondary symptoms. In the second and remaining series of cases, however, the disease was not discovered until much later, and most of them suffered very severely from secondary symptoms, the last two cases (third and fourth series) particularly so. As regards tertiary symptoms, it is yet too early to say anything concerning the primary and secondary symptoms. Mr. Hutchinson says: "I cannot speak too strongly as to the vast apparent advantage of the mercurial plan. The lesson of the cases is very clearly opposed to the too prevalent modern doctrine that it is well to wait for secondary symptoms before commencing specific treatment, and would appear to indicate that the latter should be adopted as soon as ever the condition of the chancre permits of an accurate diagnosis."

As regards *prevention*, Mr. Hutchinson thinks it of the first importance to diffuse the knowledge that vaccination-syphilis is possible widely amongst the profession; until all medical men believe in it, and fear it, we shall still be very unsafe. It is important next to avoid vaccinating from children whose parents are not known to the vaccinator; and, further, to decline, for the most part, using all first-born children, waiting until by the development of one healthy child a guarantee of freedom from taint on the part of the parents has been given. Lastly, the avoidance of blood-stained lymph and of recent exudation from the walls of the vesicle is a sufficiently obvious precaution, and needs no further mention.

Dr. GEORGE HARLEY said that the importance of the paper could not be denied, and that the facts had been ably and interestingly brought forward. The former paper had excited in the profession, and in those outside of it, great disquietude. There was a party who seemed to hold out against vaccination, and the first paper seemed to strengthen them. He thought that the thing ought to be put clearly either for the danger or the innocuity of vaccination. The question was difficult to solve whether there was any danger of syphilis through vaccination; it was often suspected, but there was nothing positive. Mr. Hutchinson appeared to have done this. There was one point of great importance: how long does the poison remain in the system? (how soon and how easily it may enter the system we all know). Mr. Hutchinson had referred to cases where blood had been inoculated; he remembered seeing in the hospital at Munich, about twelve years ago, an old woman, aged seventy, on whose back between the shoulders there was a large chancre, which had been produced by the following experiment: some blood had been taken from a patient on whom the secondary symptoms were just disappearing, and injected under the skin of the old woman. So that syphilis can be conveyed by the blood. Then what interval should be allowed to intervene before it was considered safe to vaccinate from a child who had secondary symptoms? A gentleman some years ago consulted him for some chest affection; there was a slight protuberance on the prepuce; he laughed at the idea of syphilis, as it was eighty days since he had been exposed; fourteen days afterwards the spot became tender, softened, and sore, and this was ninety-three days after inoculation. Mr. H. Lee saw the patient with him, and the piece of the prepuce was excised; under the microscope the fibroid elements usual in a chancrous formation were seen; the patient had no eruption, but the wound was a long time healing, seven or nine months, and then under the influence of mercury. He had married, and had several children, but had never had secondary symptoms. This would prove that ninety-three days may pass before symptoms appear. He agreed with Mr. Hutchinson in not thinking that syphilis could be conveyed by pure lymph, but thought it would if blood or pus, or mucous corpuscles from the walls of a vesicle, were inoculated. Security could only be obtained by using the first drops taken from the vesicle; in this way there would be no danger to the profession or to the public.

Mr. DE MÉRIC said there was no doubt as tothe conveyance of syphilis by vaccination. He thought the evidence brought forward to-day was not so strong as in the previous cases. He thought the condition of the vaccine should be considered; so many escaped, and only one or two of each series fell victims; it would be well to inquire if the victims had not had it before. He was not quite satisfied with the two cases; he thought in the first it might be explained otherwise; the man might have been syphilitic when vaccinated; the symptoms described were not doubtful. The second case seemed to him weak; the two daughters escaped and only the mother was affected. Mr. Hutchinson had spoken of the means to be employed to avoid the danger, and these all must admit. Vaccination must always have been carefully performed here, as mishaps have been known in Italy and Germany, and not here except in Mr. Smith's case. The advice given to vaccinators was excellent, but he did not think it was efficient. A reformation was needed. The period for vaccination ought to be extended to the sixth month, and then there would be time for the symptoms to appear; for an infected child may appear quite healthy at the third month. Then there was another thing, vaccination from the heifer should be employed at times. The ex-royal family of Naples were thus vaccinated, and why should not others have the same advantage? He thought this mode should be encouraged, but here it was withheld. He had seen it used in Paris, but perceived that private enterprise would not make it succeed here; it would require the advocacy of the Privy Council. He saw Dr. Seaton, who discouraged the mode, saying that there was no vaccination-syphilis here, and so it was not necessary. In some countries, as Italy, the people had a choice.

Mr. HENRY LEE said that the cases appeared complete, but the same idea had struck him as Mr. de Méric—it was not shown that the patients had not had syphilis; for if once a person had had syphilis, vaccination relit it up. The worst case of secondary syphilis he had seen was in a gentleman after vaccination; symptoms had been set up lasting for years. Then why do some take it and not others? This he thought might be explained by the fact that syphilis was not a persistent disease; it had its time of development; it subsided and recurred; the poison took in one and not in another. If blood was taken then it produced syphilis; so if lymph taken from a person likely to have an outburst were used, syphilis would follow.

Dr. POORE said there were two groups of persons vaccinated at the same time, and only one of each had had symptoms. In what order were they vaccinated? Was that one vaccinated the first or the last of that group?

Mr. HUTCHINSON said that that one was vaccinated the last in each group; also, in reply to Dr. Buzzard, who asked if the same lancet was used for each of the individuals in a group, he said it was believed so.

Dr. BALLARD said that these cases depended so much upon the details that they required to be thought of before an opinion was formed. One word as to the inoculation of blood. In three of Mr. Hutchinson's series of cases no blood is said to have been drawn. This statement was often made by vaccinators, who said if it was drawn and the lymph stained that they never used it. A practice followed by some when blood had been drawn was to wipe off the blood and lymph, and then vaccinate with the newly effused lymph. This he thought was quite as dangerous as the stained lymph. There was no proof that the virus was only in the red corpuscles. If the vessels were opened it would transude after the corpuscles had ceased to pass out.

Mr. SAVORY said that, if only from the record of the cases, every unprejudiced mind must say that syphilis was transmitted by vaccination. There would be some difficulty if the fact were not admitted that fluids transmit syphilis; for if a child is born syphilitic we have to go to the semen, something derived from the blood. In vaccination-syphilis, a child with disease propagates it to another. Constitutional syphilis may be transmitted from a man to a woman without her conceiving by him, but usually it occurred through the child becoming syphilitic; they might cohabit for a long time without syphilis, but if she conceived then she acquired syphilis, and these facts were equally strong for the transmission of syphilis by vaccination.

Mr. BRUDENELL CARTER said he had often seen vaccine lymph in tubes with flocculent matter, and should think that this flocculent matter might easily carry the syphilitic virus.

Mr. MORRANT BAKER said great stress had been laid upon the bleeding of vaccine vesicles; but let there be six persons to be vaccinated, and one—say the third—be syphilitic, might it not be probable that the third conveyed the disease to the others if the same lancet were used? for blood was always drawn in vaccination.

Mr. GEORGE COOPER said he had been a public vaccinator for twenty-seven years, and had vaccinated many thousands, but he had never seen a case of syphilis after vaccination. He did not deny that it might occur, but he had never seen it. He believed that if the vesicle were not wounded, and only pure lymph used, no syphilis could occur.

Mr. HUTCHINSON, in reply, said that, as to the duration of syphilis in an individual, and how long we should wait to avoid danger from vaccinating from an infected person, all would agree that if a person has once had syphilis it would always be dangerous to vaccinate from him. With regard to his cases and their value, in the first the man had a chancre and nothing else formed. As to the vaccinifer in the second case, that child and an older one suffered from ulceration of the anus when teething; the surgeon who attended the child said he had no doubt it was a condylomatous growth; so the vaccinifer was syphilitic. Then the duration of the syphilis in the family was interesting. This child was born six years after marriage, and three years after the second. These were somewhat alarming facts as to the latency of the syphilitic virus. When the surgeon vaccinated the child he could not have supposed it was syphilitic; there were no symptoms then, and, if questioned, the mother could have shown her eldest child healthy. This mother had a baby at the breast, and she had promised to bring it to him that he might see if it showed signs of congenital syphilis. The laws of latent syphilis needed to be investigated. Some say that children never have it long latent—never show it after the fourth month. Mr. De Méric's proposition was good as to the age of a child when vaccinated, but he believed the blood could convey the taint, and yet no symptom be found in the vaccinifer, and the child might pass through infancy and only show it at puberty, as by iritis, &c. He (Mr. Hutchinson) did not see any weak point in the second case. In the first case vaccination-syphilis was not so clearly proved. Two children had died; but he could get no symptoms of syphilis, and had only the physiognomy of the vaccinifer to prove it at present. He had not spoken of vaccination from the heifer, as he did not think it came into his paper. He did not think compulsory vaccination could be maintained unless we allowed children to be vaccinated from other sources. As to the risk run in his second case, the lady wanted to be vaccinated from a heifer. The surgeon at last said this child was healthy, and used it, and syphilis followed; so there was difficulty in saying the child was quite free. There were no facts to prove that the persons were the subjects of syphilis before vaccination. Vaccination might affect a previously diseased constitution, but could never bring out in a person previously healthy symptoms of primary and secondary syphilis. Then there was the question, what degree of alarm was to be felt by the facts established? Was the occurrence of syphilis in this way a rare thing? He should say that if the gentleman in whose practice the second series of cases occurred had been asked that question he would, before he had sought out the cases, have said the same as Mr. Cooper had said. It was the same in the two series he had now brought before the Society. He had doubtless met with cases before this, as had other practitioners, but had never thought of them till his attention was called to them by others.

MEDICAL SOCIETY OF LONDON.

MONDAY, JANUARY 13TH, 1873.

MR. THOS. BRYANT, PRESIDENT, IN THE CHAIR.

DR. THOROWGOOD read some notes of a

FATAL CASE OF INTESTINAL OBSTRUCTION.

M. C——, aged sixty, was seen by Dr. Thorowgood on the evening of May 20th, 1872, with Dr. Wallace of Hackney. The general health had been good up to five weeks previous. On the 16th of May he was seized with severe pains of a griping and twisting character. The bowels had been for several days without action; frequent enemata and purgatives having failed to give any relief, recourse was had to opium, which relieved the pain. When seen on the 20th he had been a week without an action of the bowels; his face was flushed; pulse 88, not thready; tongue dry; frequent vomiting, but not of a stercoraceous nature; no jaundice; no passage of blood by bowels. Abdomen swollen and tense; a solid mass felt on right side. A large injection was given by means of the gravitation tube; it passed easily into the bowel, and returned, bringing with it a few small pellets of fæcal matter. An ointment of mercury-and-belladonna was applied over the abdomen, and quarter-grain doses of extract of belladonna were given every two hours. He was seen again on the 24th: tongue quite dry, pulse 88, urine scanty and turbid, and distress extreme. An injection containing extract of belladonna was given, and a pill—composed of half a grain of opium-powder, a quarter of a grain of extract of belladonna, and half a grain of acetate of lead—every two hours. After he had taken about ten pills the bowels acted freely, with immense relief. On the 30th May he had four good consistent motions, and the mass on the right side got much smaller. On June 6th the obstruction appeared again, with stercoraceous vomiting; for a time he got some relief by taking pills of aloes three times a day, and the mass on the right side became scarcely perceptible, the bowels acting with loose motions under the influence of these pills. On August 3rd he sank, and died quietly. The post-mortem was made the next day by Dr. Wallace, who was allowed to examine the abdomen only. Extensive atheroma of the aorta and iliac arteries was the only morbid appearance found. No stricture or tumour involving the bowel was discovered, though the lower part of the small and the whole of the large intestine were carefully examined. The coat of the large intestine was wasted and thinned to a great degree.—In commenting on this case, Dr. Thorowgood alluded to the importance of careful diagnosis. The rectum, especially, should be examined by the finger and by a bougie or tube, to see if there be present one of those annular strictures high up which were described by Mr. Henry Smith in his Lettsomian Lectures in 1865. The intense twisting pain at first seemed to point to a possible intussusception as the commencement of the trouble. To relieve this belladonna was tried, and this not succeeding, acetate of lead was added, in the hope that, as lead acts powerfully on the

muscular coat of the bowel, so as to alter its calibre, it might in some way aid in untwisting the invagination. One case was mentioned in which acetate of lead given thus had succeeded in affording relief, and in the present case, after as much as five grains of the acetate had been given, copious relief followed. The bowels having been once opened, attempts were made to keep them open by enemata and stimulating purgatives, and though these succeeded so far as to remove the swelling on the right side of the abdomen, yet the patient sank and died with all the symptoms during life and the appearance after death of atony and wasting of the bowel.

In reply to questions by Mr. de Méric and Dr. Wiltshire, Dr. THOROWGOOD said he thought that galvanism after the method advised by Dr. Althaus might have been used with benefit. He did not himself see the patient later than June, but did not think galvanism was used. During life there was no evidence of heart disease. The mesenteric arteries were not examined, and Dr. Thorowgood had no theory to offer as to any causal connexion of the atheroma of the aorta and iliacs with the atony of the bowel. In reply to Dr. C. T. Williams, Dr. Thorowgood said he gave the acetate of lead when all other means had failed in the hope that it might, by acting on the muscular coat of the stomach, untwist the invagination. Further, he had known the acetate of lead given in one case with conspicuous success.

Dr. WILTSHIRE cordially approved of treatment by means of opium and belladonna; but would not nux vomica or strychnine have been very useful in this case? He asked whether there was any disease of plugging of the mesenteric arteries, especially of the part of the bowels which was found to be thinned? What had become of the tumour felt during life? Was it a fæcal tumour due to paresis of the damaged bowel?

The PRESIDENT said many old people died from bowel disease, especially fæcal obstruction of the lower bowel. Many so-called cancer cases were of this kind. The intestine seemed to die first. He thought stimulating enemata were very useful, and he had seen striking results from electricity. Were there not cases of obstinate constipation which justified opening the abdomen? He related a case of a severe kind, in which colotomy was performed, the cæcum being opened and found to be empty. Afterwards some fæcal matter followed, and the patient got well with an artificial anus. Four years afterwards the wound was closed, the lower bowel having been prepared for some days previously by injections. Such a case showed that circumstances did sometimes arise which justified operation in cases of severe and prolonged constipation.

Dr. THEODORE WILLIAMS then read a paper on

THE VARIOUS MODES OF CONTRACTION OF CAVITIES IN PHTHISIS AND THEIR RESULTS.

The author commenced by observing that it was very difficult to foretell contraction of cavities, and remarked that when it took place the patient was by no means out of harm's way, for the contractile process might overstep the required bounds, and seriously obstruct respiration and circulation, causing death by dyspnœa and dropsy. Moreover, fresh disease might arise in the other lung. Contraction of cavities, according to Dr. Williams's statistics of 1000 cases, occurred in 6 per cent. of patients in the third stage, and the void was filled in by one or other of the following means:—1st. By expansion of lung-tissue around the cicatrix. 2nd. By an expansion and drawing over of the opposite lung to the affected side. 3rd. By displacement of the neighbouring organs, the heart, liver, stomach, and spleen. 4th. By collapse of the chest-walls. Dr. Williams then dwelt upon these modes of compensation, and explained the changes which the physical signs undergo during contraction, especially the increase of resonance over the former seat of the cavity and the shifting of the cavernous sounds to the posterior regions of the chest previous to their disappearance. This was owing to contraction always taking place towards a fixed point, which was generally the root of the lung, but not necessarily so, as it might be some spot where the pleura was strongly adherent. A contracting cavity of the left lung, as a rule, caused more displacement of organs than one of the right. When the cavity was in the right lung, the liver might be raised, the left lung drawn across, and the heart considerably displaced upwards, outwards, and in the direction of the axillary region, which it sometimes reached. Collapse of the chest-wall generally took place in all cases of contracted cavity, but often at a late date, the expansion of the healthy lung and the displacement of organs, particularly the abdominal, sufficing to fill the void for some time. Several cases were given to illustrate these points. The author then drew attention to the various periods required for contraction of a cavity in these cases. In some it took place in two months, in others it occupied two years, the size of the cavity being no index of its rate of contraction. The results of the process on the general health of the patient was then considered, and it was pointed out that in some patients the contractile process caused so much obstruction to the respiration and circulation as to create great and increasing dyspnœa, irregular action of the heart, and eventually death. Another termination was by albuminuria (dropsy), and the few kidneys examined after death showed signs of degeneration.

Dr. THOROWGOOD agreed with Dr. Williams that more attention ought to be paid to the phenomena of contraction of cavities. He thought it occasionally followed symptoms of inflammatory action. He would like to hear more as to the best means of promoting the contraction of a lung cavity.

Dr. SANSOM's experience went with Dr. Thorowgood, that contraction often followed evidence of local irritation, and he thought perhaps it might be well to induce such a process. Acupuncture might possibly be justifiable.

Dr. WILLIAMS, in reply, said he knew of no means of promoting contraction of cavities, but he had found endeavouring to improve the patient's health and strength and allaying local irritation to be the best course to pursue. He could not agree with Dr. Sansom that the induction of a state of hyperæmia was advisable, and he should hesitate about the use of acupuncture of the lung, although Dr. Dieulafoy had shown it to be less dangerous than was supposed with regard to cavities, being more likely to contract in one kind of phthisis than in another. His impression was that this was the case in phthisis of pleuro-pneumonic origin. He had not found that intercurrent inflammation assisted the contractile process, but rather the reverse.

Reviews and Notices of Books.

Microscopical and Physiological Researches into the Nature of the Agent or Agents producing Cholera. By J. R. LEWIS, M.B., and D. D. CUNNINGHAM, M.D. (Appendix C, Eighth Report of the Sanitary Commissioner to the Government of India.) Calcutta. 1872.

OUR readers may perhaps remember that Dr. Lewis, of H.M. British Army, and Dr. Cunningham, of H.M. Indian Army, have been employed by the Government of India in the investigation of cholera, and their microscopical observations on the discharges have attracted much attention. They have now related the results of their investigations into the condition of the blood and other points. The Report embodying their researches is divided into three parts, which we will abstract in order.

1. *The microscopical characters of the blood in cholera.*—The blood during life was obtained by pricking the finger; after death it was taken from one of the cavities of the heart. When treated with osmic acid and acetate of potash the red corpuscles were unaltered. Few leucocytes were present. There were numerous minute irregularly-rounded bodies, giving a refraction like that of leucocytes, and varying in size; they were scattered in little patches or heaps, and were fragments of bioplasm. These little bioplastic fragments were the only point distinguishing the blood from healthy, and even these were not constant. Not the slightest trace of bacteria could be seen with $\frac{1}{17}$ immersion lens and a $\frac{1}{12}$ objective of Powell. Blood during life and after death was identical. When the blood was received in wax cells (but was not treated with osmic acid), bioplastic bodies

resembling white blood, or pus cells, appeared in the marginal serum and then in all parts; they were larger and more delicate than white cells, and moved freely, often carrying red cells with them; they could be seen distinctly to subdivide and break up into a second generation of bioplasts, which also moved actively. In about twenty-four hours the freely moving amœboid stage was nearly over, the bioplasts increased in density and refraction, the granules in their substance became more distinct, and some began to show vacuoles. All this time the serum was quite free from monads or bacteria, but sometimes became stained from the red corpuscles. Eventually the bioplasts sometimes broke up into molecular flakes, which might be taken for monads; in other cases the bioplasts went through more complicated changes—minutely described by the authors,—which led to the escape of the granules, and the conversion of the formerly uniform bioplast into a body with a delicate cell-wall and a smaller nuclear mass. After the escape of the contents of the bioplasts there was an abundant development of irregularly oval and rounded particles, scattered or arranged in pairs, trios, or series. The nature of these was quite uncertain; they underwent no further development, and were perhaps of an oily nature. There were also more persistent molecular masses and milky spots.

The authors have made out with certainty that the blood "is, as an almost invariable rule, free from bacteria, either actual or potential." A slight development of bacteria occurred in one or two cases; but this might happen in the most healthy blood. There was also an entire absence of fungal elements. There was a marked resemblance between the bioplastic bodies in the blood and those found in the cholera evacuations: the blood bioplasts in passing through the various changes "will come to present every modification of appearance and characters presented by those found in the discharges." The authors, in fact, without absolutely affirming the identity, imply that the peculiar amœbiform bodies in the cholera discharges are really the bioplasts of the blood, and this is perhaps the most important point they have yet made out. In order to have a control for these observations, they examined the blood in many other diseases. Similar appearances to those in cholera blood were found to a certain extent in all samples; but in no single case were they in anything like the same proportion as in cholera, where sometimes little white spots as large as a millet-seed could be seen by the naked eye, and were found to be composed entirely of these bioplasts. The authors do not wish to imply that the amœboid bioplasts in cholera blood are specific; but they affirm that cholera blood is specially adapted to their development, or at any rate to their being readily recognised and well preserved. They mention that in a case of blood from typhoid fever they found a great diminution in the white corpuscles, but numerous interlacing bacteria-like filaments stretching from one clustre of red corpuscles to another. On subjecting a sample of the same blood to the fumes of osmic acid, they found no trace of these bodies, and infer that they were not bacteria, but due to the separation of fibrine, and they were led to doubt if Davaine's bacteridia in the "splenic apoplexy" might not be really the same bodies.

With regard especially to bacteroid and fungoid elements in the blood, the authors give a table embodying the notes of 128 different specimens of blood, which shows that in no single case were such organisms detected when the blood was fresh, and in only a small number of cases did they afterwards appear. It is clear, in fact, that the bacteroid or fungoid origin of cholera has been completely disproved, as far as the blood and the evacuations are concerned.

2. *Experiments on the introduction of organic fluids into the system.* — Choleraic evacuations, fresh, one day old, two days old, three, four, six, eight, ten, fifteen, eighteen, nineteen, and twenty-two days old, were injected into the veins of dogs. Aqueous solution of choleraic material was also thrown into the veins, and choleraic material was introduced into the peritoneal cavity of animals. The following were the results: in 32 dogs, 13 died from injection of cholera evacuations, or 40 per cent.; in 7 dogs diluted cholera material was introduced, and 2 died, or 28·5 per cent.; in 21 dogs solution of ordinary non-choleraic alvine discharges were injected, and 6 died, or 28·5 per cent. The causes of death in the dogs treated with choleraic discharges were not choleraic in nature; intestinal lesions were produced of a very marked and tolerably constant character; but these appeared to be the consequence of local disturbance of the circulation induced by the decomposing matter, and arose whether that decomposing matter was choleraic or not. In fact, the experiments failed entirely to produce anything like cholera in the dog.

3. *Experiments on the section of the splanchnic and mesenteric nerves.*—The authors were struck by the fact, that in the experiments on dogs just related there was an almost total absence of any increased secretion of fluid from the mucous membrane, however profoundly it might be affected. They desired then to see how they could promote such increased secretion, and determined to try the effect of section of nerves. Division of the splanchnics had no effect whatever on intestinal excretion. Division of the mesenteric nerves was then performed, the portion of intestine being looped. An important discovery was made—viz., that "the relation which the secretion of the small intestine bears to its nervous supply is strictly analogous to that which has long been known to hold good in regard to the secretion of the submaxillary gland and its nervous supply." That is to say, partial division of the intestinal nerves produces secretion of fluid; total section lessens the secretion. The authors believe there are nerve-filaments which promote, and filaments which inhibit, the intestinal secretion. They consider that this fact must have an important bearing on the pathology of cholera.

The authors regard all their work as merely preliminary to the inquiry with which they have been entrusted by Government. Their observations are, in one sense, preliminary; but they really are very important stepping-stones to the discovery of the solution of the enigmatical nature and spread of cholera. Whether they will solve the enigma, the future must show; but this much is certain, that our two authors have studied their subject in the most correct method, have felt no labour too great to arrive at safe results, and have already made observations and discoveries of the highest value. We earnestly hope that health may be spared them to continue their most important work; and that the Government of India will grudge no cost which can aid them in the solution of a mystery which concerns the well-being of all men.

De l'Electrisation Localisée et de son application à la Pathologie et à la Thérapeutique, par Courants Induits et par Courants Galvaniques interrompus et continus. Par le Dr. DUCHENNE (de Boulogne). Troisième Edition. Paris: T. B. Baillière et Fils. 1872.

THE appearance of a new edition of Duchenne's classical work is an event which will be received with satisfaction by the medical public of Europe. The present edition is far more than a reprint of former editions. The work has been to a great extent remodeled, and the author has laboured hard to keep it on a level with the rapid advancements which have been made during the last few years in electrical science, clinical medicine, and pathological anatomy. The book has grown to the extent of nearly a hundred pages

since 1861, the date of the last edition; and, judging from the literary style of the author, we do not think that he is likely to follow the example which we believe was set the profession by the late Mr. Syme, of making every edition of his work *smaller* than the one which preceded it. Although we are decidedly of opinion that Dr. Duchenne might study with advantage the art of writing concisely, and that the information in this treatise, valuable as it is, would gain rather than suffer by compression, nevertheless we are greatly obliged to him for the additions which he has made to the present edition.

To the chapter on Traumatic Paralyses Dr. Duchenne has added a section specially devoted to Paralysies Obstétricales. "Certain violent obstetric manipulations," says Dr. Duchenne, "necessitated by the difficulty of bringing down the arms after the birth of the body (an act which is accomplished by strong traction on the shoulder, or by hooking a finger round the axilla) sometimes produce a paralysis of the upper limbs. The prognosis is grave. It can be cured by localised faradisation; but, left to itself, it becomes incurable, and produces atrophy of the member." This form of paralysis is not unfrequently complicated by fractures and dislocations.

Another important addition is the chapter on Paralysie Pseudo-Hypertrophique ou Paralysie Myo-Sclérosique. This disease is characterised by—1. A decrease of motor power, situated at first in the lower limbs and lumbar muscles, and thence spreading gradually to the upper extremities, and ultimately abolishing all power of movement. 2. An increase of size in the affected muscles, which increase of size is produced by hyperplasia of the interstitial connective tissue, and by an abundant production of fibrous tissue and (at a later period) of fat-globules. This chapter is illustrated by two excellent plates, giving the portraits of several patients, as well as microscopic drawings of their muscular fibres. Dr. Duchenne has been in the habit of examining the muscular fibres of his patients during life, and he gives a drawing of the little instrument which he has used for the purpose of "sampling" his subjects. He complains that this mode of exploration was refused him by the friends of many of his patients; but M. Bergeron succeeded in finding him a boy who, like the one mentioned in *The Times* the other day, had no objection to this mild form of vivisection being practised upon him, and from whom Dr. Duchenne had succeeded in obtaining specimens, the micro-photographic drawings of which are given to the reader.

There are two other additional articles, the one on Acute Spinal Paralysis of the Adult, and the other on Subacute General Spinal Paralysis. There are also several new illustrations, some of which are exceedingly good, while some others (the three on page 390, for example) are about as bad as one can well imagine such things to be. We think that the time has arrived when the title of this book should be altered. The title as it stands at present is assuredly calculated to mislead. One-third of the book is certainly devoted to the discussion of localised electrisation, but the remainder is filled with a series of papers on various forms of paralysis and spasm, together with a few chapters on orthopraxy. The title is not only deficient, but it is also redundant, since Duchenne's localised *electrisation* comprises little more than localised *faradisation*. On this subject Dr. Duchenne probably is better informed than any man living, but we certainly think he has much to learn about other modes of electrical treatment. The student who expects to find in this book anything like a complete account of electro-therapeutics will be disappointed; it is, as we have said, both more and less than its name implies.

Foreign Gleanings.

CONJUNCTIVITIS DUE TO THE ACTION OF SCHWEINFURT'S GREEN.

DR. KITTEL has recorded in the first January number of *Allg. Wiener Med. Zeitung* the particulars of an epidemic of conjunctivitis due to the action of Schweinfurt's green (a mixture of arsenious acid and acetate of copper). Several among a body of girls attached to a workshop for the manufacture of artificial leaves were suffering from disease of the eyes, and Dr. Kittel found that the colour used was a very light powder, consisting of salts of arsenic and copper. The affection generally began with an intense pain in the eyes and photophobia. Acute catarrh next followed, accompanied by redness and desquamation of the internal surface of the eyelids. In some cases there was to be seen on the papillary body of the lower eyelid a small round patch of a greyish colour, which stuck to the surface, and on being removed caused slight hæmorrhage. The conjunctiva of the upper eyelid never presented this alteration. The inflammatory process produced a certain degree of thickening of the conjunctiva, and, consecutively, some tumefaction of the eyelid. The cornea was always unimpaired. There generally existed at the same time various inflammatory lesions around the alæ nasi. Attention to cleanliness and proper ventilation, together with frequent change of the *personnel*, were the means successfully adopted for preventing a recurrence of the epidemic.

PHYSIOLOGICAL EXPERIMENTS ON THE BODY OF A GUILLOTINED SUBJECT.

At a recent meeting of the Société de Biologie, Dr. Onimus related the results of various experiments which he had performed on the body of a man who had just suffered death by the guillotine. He had been enabled, he said, by means of electricity, to show that the external intercostal muscles raised the ribs, while the internal ones lowered them. The former are inspirators, the latter expirators. Thus Hamberger's theory is confirmed. The long lateral peroneal lowers the internal border of the foot, and is slightly extensor and abductor, as Duchenne de Boulogne had already shown. The muscles of the face are the first to lose electro-muscular contractility, which the masseter, however, preserves for a long time. In the limbs the extensors lose their excitability before the flexors. The muscles which preserve this property in the most remarkable degree are those of the abdomen and trunk. Lastly, the form of muscular contraction presents peculiar variations of aspect as contractility diminishes. It must be remarked that the order according to which muscles lose their contractility is analogous with that presented by saturnine muscular paralysis.—*Gaz. Hebd. de Méd. et de Chir.*, Jan. 24th.

STRUCTURE OF MUSCULAR FIBRE IN INSECTS.

E. Grunmach, in a recent number of the *Centralblatt* (No. 57), gives the results of his investigations upon the muscles of insects. He finds—1. That the structural element of the transversely striated muscular fibre of insects is the "columna muscularis" of Kölliker (muskel-säulchen). 2. That the columna muscularis is composed of a clear lustrous matrix, in which, at definite distances from each other, lie dull prismatic bodies, the so-called sarcous elements, which are either all of equal breadth or are alternately broad and narrow. 3. That the columnæ are separated from each other by interfibrillar or intercolumnar substance, in which fat-molecules and other granular particles are suspended. 4. That a certain number of these columnæ form the primitive fasciculus (fibre) of muscle which is invested by sarcolemma. 5. The so-called yellow muscles of insects are to be included with the other transversely striated muscles.

LIVER FERMENT.

In the last part of Pflüger's *Archiv* (Heft I., 1873), v. Wittich details experiments which have led him to the conclusion that the liver, even when it has been thoroughly washed out and is perfectly free from blood, contains a ferment capable of converting starch into sugar, and he thinks there is good reason for believing that it is generated in the proper cells of the organ.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 1, 1873.

THE proceedings at last Tuesday's meeting of the Medical and Chirurgical Society possess a great but melancholy interest. They mark, we fear we must say, a new and very considerable advance towards the proof that syphilis may be inoculated during the process of vaccination. Notwithstanding all the assertions which had been so freely made at various times that syphilis could be thus communicated, there had never been any sound evidence of the fact until Mr. J. HUTCHINSON, in 1871, related the history of two series of cases, in each of which primary and secondary symptoms had been communicated to several persons by one vaccinifer. We do not now care to go over the old French and Italian evidence respecting asserted outbreaks of vaccino-syphilis, for we have frequently intimated our opinion that the facts in all these cases had been put together with such carelessness and such an utter absence of patient sifting as must impress any unbiased mind with the danger involved in basing upon them any conclusions respecting so serious a question as that of vaccino-syphilis. It was otherwise with Mr. HUTCHINSON'S two series of cases brought forward in 1871. Even on that occasion THE LANCET felt itself called upon to fulfil the function of *advocatus diaboli*, and to urge every possible objection and difficulty with which the supposed facts could be met, more especially until the persons supposed to be affected with chancre had corroborated this belief by developing secondary symptoms. But we did not hesitate from the first to admit that Mr. HUTCHINSON'S mode of conducting his inquiries was far more reliable than anything of the kind that had been previously seen; and we may at once make the same admission respecting the histories which he related on Tuesday last.

As the paper and the discussion will be found in another part of our columns, it will only be needful here to point out the principal circumstances of interest in the two new series of cases.

The first (or, taking in Mr. HUTCHINSON'S previous paper, the third) series of facts starts from the case of a well-conducted married man, aged forty-six, who applied at the Moorfields Ophthalmic Hospital on account of iritis, which was at once detected to be syphilitic, as it was accompanied with secondary rash, &c. He had been vaccinated three months previously; but his sore, after healing, broke out again about a month after vaccination, and took on the form of hard chancre (with indolent bubo in axilla). A fortnight later a copious secondary rash appeared; the iritis occurred a month after this. The vaccinifer was a baby, who, when seen by Mr. HUTCHINSON (at eight months old), looked healthy, and showed no signs of syphilis except a sunken bridge of the nose; it was a third child, the first two having died in infancy. It is remarkable that, of twelve persons vaccinated from the same baby, only the man above mentioned suffered any harm; it is believed that he was the last of the twelve, and so got, not pure lymph, but either blood or serum newly exuded from the vessels.

The second (or fourth) series was brought to light through the case of a lady, aged forty-five, who applied to Mr. HUTCHINSON on account of a vascular growth in the urethra, but was discovered to be suffering from syphilitic rash. On inquiry, it appeared that she was vaccinated in May, 1871, that none of the punctures took, but a month later one of them inflamed and formed a chancre, which was followed by rash and iritis. The lady was one of three persons (the two others being her daughters) who were vaccinated at the same time from the same baby. The daughters suffered no harm. A number of other persons had been previously vaccinated from this child, but they could not be traced. Here, again, it is probable that the lady who got syphilised was the last of a considerable series vaccinated, and must have been inoculated with freshly-exuded serum, not the original lymph of the vesicle. The vaccinifer was looking well at the time of the vaccination, but afterwards, during its dentition, got condylomata; and an elder sister had condylomata and slight hydrocephalus.

We think, then, that the inference from the whole group of cases related by Mr. HUTCHINSON must be decidedly in favour of the *possibility* of communication of syphilis by the inoculation either of the blood of a syphilitic vaccinifer, or of the serum which oozes into the vesicle if the vaccinator be unwise enough to continue to take fluid after the first drop of lymph—the true product of the vaccination—has been exhausted. Not one particle of evidence has been adduced to show that the true lymph can be infected with syphilis; and, as our readers are doubtless aware, the evidence against such a possibility is enormously strong. And even the communication by blood, or by serum obtained after the first emptying of the vaccine vesicle, though it must now be admitted as a possibility, cannot for a moment be regarded as more than a very occasional result of these accidents. We are very glad to observe that Mr. HENRY LEE had the sense and candour to point this out forcibly on Tuesday. He observed that, supposing constitutional syphilis to be communicable by blood or serum, it was plain that this was no necessary process, but only happened when the constitution of the person from whom the inoculation was received chanced to be in some peculiar state of ferment which revived the dormant activity of the syphilitic poison. This must certainly be true, or syphilis would be far more widely diffused in the world than it actually is. By these arguments it is evident that we reduce to a minimum the chances of vaccinal communication of syphilis; for the latter event can only take place when all the following conditions are simultaneously present:—(1) A syphilitic vaccinifer; (2) an active condition of the syphilitic element of the vaccinifer's blood; but, at the same time (3) an absence of such external symptoms of syphilis as would deter any commonly upright surgeon from using the subject of them as a vaccinifer; (4) the gross imprudence committed, of employing either blood or the serum obtained after the emptying of the vesicle. It is an absolute impossibility that all these conditions can be more than very rarely fulfilled, and we therefore think that Mr. HUTCHINSON is

gravely to blame for the tone of his remarks in his concluding speech at the meeting. Those remarks, when translated by the imperfect understanding of the non-medical public, will convey a most erroneous impression as to the prevalence of vaccino-syphilis, and will aggravate in a perfectly unwarranted manner the terrors of the laity. And as for the practical suggestion made by Mr. HUTCHINSON and another speaker, that the date after birth within which vaccination is compulsory should be altered from three months to six months (or, indeed, as Mr. HUTCHINSON suggested, to some indefinitely older age), in order that the freedom of the vaccinifers from syphilitic taint may be placed beyond suspicion, we must express our condemnation of any such proposal. To those who know anything of the enormous practical difficulties in so handling vaccination as to make it a really efficient prophylaxis against outbreaks of small-pox, we need hardly say that even the extension of time to six months would render compulsory vaccination almost entirely inefficient as a real preventive, and any further extension of the period would convert the whole affair of vaccination into a mockery, and turn our hopes of stamping out small-pox to vanity and delusion. It is a perfectly intolerable risk which we are asked to incur, and we trust that Mr. SIMON will lose no time in denouncing a proposition which is fraught with national danger of the gravest kind, and which is utterly unjustified by the very small number of facts which so keen a clinical investigator as Mr. HUTCHINSON, with an enormous field of observation at his command, has been able to detect.

WE referred last week to the subject of the too frequent quarrels and differences which break out between members of the profession who practise in the vicinity of, or in any sort of rivalry to, one another; and that depend frequently upon simple misunderstanding, or upon misrepresentations by other persons; occasionally, perhaps, upon actual wrong-doing on the part of one or other practitioner. All will allow that such differences are not only undesirable in a moral point of view, but that they tend, seriously and distinctly, to lower the status of the profession as a whole, and thus to lower also the status of those who take part in them, and to render them, if aggressors, more liable than before to be themselves aggrieved in a similar manner. A medical man who does not scruple readily and willingly to supplant a neighbour in professional attendance should remember that he at the same time loosens the bond connecting the particular patient with his doctor, and helps to create an appetite for change that will probably not be satisfied with a single indulgence. He must not be surprised if he be himself supplanted in turn, or if the example thus set should become contagious. We have not the smallest sympathy with the prevailing notion that a sick person in some sense belongs to his customary doctor; nor with the complaints that often reach us, couched in a tone of injured proprietorship, when some free-born Briton has trampled this notion under foot. Still we think that practitioners are bound to act upon the doctrine that members of the same calling have, as such, a right to be treated with consideration and respect; and the first solicitude of a medical man, when brought into any sort of relation with the patients of another, should be to see that the latter receives his due. In every case of apparent neglect or malpraxis the greatest care should be taken that the practitioner seemingly in fault is not blamed without ample opportunity for explanation, or for the rectification of mistakes; and there should be no haste or eagerness, but rather a decent reluctance, to profit in purse or reputation by the possible errors of a rival. "Another hour, Sir, of that practectioner"—once exclaimed a provincial hospital surgeon, descended from Milesian kings, when called to a case in which a neighbour had failed to satisfy the patient—"only another hour, Sir, and ye would have been a dead man! As it is, Sir, I shall save ye! I shall save ye with difficultee, but I shall save ye; and ye'll remain a living monumint of me skill!" But this same worthy was desperately offended when a public body rejected his certificate of the sickness of a man in their employment, and desired that another should be procured from "some competent person." He realised, but did not relish, the fulfilment of the prediction that with what measure we mete, it shall be meted to us again. Even on this low ground, if on no higher ones, it behoves us to be chary of allowing even the smallest imputation to be cast upon a neighbour. Medical men who practise in the same locality should be aware that the course of events must bring them into occasional collision, and should be prepared so to govern themselves as to render the collisions harmless. The way to do this is simply for each to act up to that rule of English law which tells us that everyone is to be held innocent until he is proved to be guilty, and to that rule of Christian morals which teaches us to do as we would be done by. The former would dispose us to seek and to accept the explanation of a neighbour who seemed to have transgressed against us; the latter would render it unlikely that we should transgress ourselves. In seeking explanations, however, there are at least the two customary ways—the right and the wrong—of going to work. The right way is to assume that the explanation will be satisfactory and complete; the wrong is to assume that it will not. The bitterest of all professional quarrels are those that have been fanned into flame, from small beginnings, by an interchange of civilly venomous letters; and men eminently calculated to be friendly and helpful neighbours have been kept apart for years because the Devil has tempted one of them to write to the other, about the case of Widow Jones and the stupid interference of the parson of the parish, in a high-flown vein of literary English. A twist of paper containing the inquiry "What is all this bother about Widow Jones?" would have produced a friendly response, containing materials for a laugh over the whole affair; while the announcement that "I have heard with boundless and unfeigned surprise and regret of the ungentlemanlike demeanour and unprofessional language which you are stated to have exhibited and employed, with reference to myself, in the house of Mrs. Rachel Jones, and in the presence and hearing of the Rev. Slow Couch," and thus *ad infinitum*, will only induce the recipient to clothe his ideas in similar verbiage. He will probably "repel with just and merited indignation the injurious and insulting observations leveled by you at my 'anguage and demeanour," and so forth; until the original

casus belli is lost sight of, and buried, like the body of VALERIUS, beneath the weight of the slain partisans who have gradually been brought into the fray. We are constantly asked to express opinions about cases in which our chief feeling is regret that certain letters should ever have been written; and the general conclusion to which we have been led by long experience is that professional differences seldom arise from conscious or intentional wrong-doing on the side of either of the parties to them. In most cases they begin as blunders, and are developed by polite letter-writing. The remedy for them would be to assume in every case an absence of evil motive, to seek in a friendly spirit for such verbal explanations as may be called for, and to render them oneself, gladly and freely, whenever another thinks they are required.

THE subject of Domestic Sanitation has been very considerably "ventilated" in the columns of *The Times* during the past three weeks; and the engineering, lay, and medical elements have all been more or less represented in the discussion created by Mr. RAWLINSON'S letter. The discussion is not likely to be exhausted for some time to come; but this letter suffices to show pretty exactly how necessary it is that, in all sanitary matters, the engineer and the medical officer of health should go hand in hand; that one cannot work successfully without the other; and that this combination of knowledge is not likely to be found in, or possessed by, one man, or one set of men, for many years to come. And hence it is all-important that health officers and sanitary engineers ("civil" and practical) should have, at all events, some principles in common, so that the outlines of their practice may be clearly defined, and in unison. It does not appear, however, that we have advanced very far in fixed principles of domestic sanitation. It must have been pretty well known among architects and builders for several years past that house-drains ought to be carried directly outwards, and not across the basement of a house; and that such drains can be ventilated when they arrive outside simply and easily. The sanitary advantage of building waterclosets against an outer wall would seem for some time to have been generally recognised; and the discussion about the waste-pipe and the water-supply can hardly be classed as a new thing in so-called sanitary science. But, as may be seen by an inspection of hundreds of houses in Belgravia and Mayfair, glaring evils are perpetuated in the newest and most costly houses of these districts; sewer gases soon pervade the building, and fever, with its attendant satellites, is the natural and inevitable result. We should like to know how many householders (to whom money is no object) ever think of asking for a plan of the drainage under the house of which they have made so careful an inspection. Does it ever occur to them that the things that are seen may be fair, but the things that are not seen may be foul? We believe that most tenants *in futuro* limit their inquiries to the gas and water-supply, and seldom if ever examine into the inlets, outlets, or quality of either. The law of supply and demand, however, will hold here as elsewhere. When Mr. STANSFELD and the authorities at Gwydyr House have emerged from the slough of despond and unutterable confusion in which they are wallowing at present, and the Public Health Act is rendered practically workable, the mind of Paterfamilias will be speedily educated to the proper contemplation of this question, and every alluring sectional plan of the well-appointed city house or delightful suburban villa will perforce be accompanied by a complete drawing of the drains.

House ventilation, in spite of Mr. RAWLINSON'S advice, is not likely to err on the side of simplicity for a very long time to come. We are surrounded by valves, fans, syphons, tubes, hot-water pipes, flues, down-casts and up-casts, of every possible description; but we "take cold" as much as, and coddle more than ever. The ridiculous figures of great-coated old men and beshawled old ladies roasting before the fire while the "zephyrs (by no means softly) pass them by" has taken from the ventilating system of Mr. RAWLINSON any claims to attention that it might have possessed in the eyes of his most ardent admirers. We are told by some eminent sanitary authorities to introduce our cold air from above, and by others to bring it in from below. One writer reminds the public that "bad air can only get out as fast as fresh air is admitted"; and another enunciates the curious theory that cold air is much more injurious, "probably, to all sleeping persons than moderately impure air which is sufficiently warm." As to the latter statement, we may ask, parenthetically, when is air *moderately* impure, and when is it *sufficiently* warm? A third letter-writer has "understood hitherto that it was admitted by nearly all practical and theoretical men that the open fireplace system of warming and ventilating is most absurd"; but he is probably ignorant of the fact that the "absurd" system is being rapidly re-introduced into all our large buildings, hospitals included. A fourth correspondent, much enamoured of warm air (? moderately impure) occupies some third of a column of *The Times* in inveighing against Mr. RAWLINSON'S well-ventilated old men and women, without attempting to furnish a solution of the difficulty. And some of the latest epistolary lucubrations have added to the complexity of the subject by tedious descriptions of furnaces and flues, that might work well enough, but could not possibly be fitted to any existing houses.

The result of this voluminous correspondence has of course been much chaff and little wheat. Having, however, sifted the one from the other, we take it (1) that open fireplaces are right and proper in all rooms, if not indispensable, and that chimneys should never be closed under any circumstances; (2) that air introduced from without should be admitted under the grate, and warmed by the tube process before issuing into the room, or, as an alternative plan, should be sent in as close to the top of the room as possible, and at such an angle as to impinge on the ceiling before descending. We are quite prepared to subscribe to the remarks of Dr. EDWARD SMITH and Dr. GARRETT-ANDERSON, that gas is unhealthy, that special exits ought to be provided for the products that it generates, and that SHERINGHAM'S (or, for aught we know, other) ventilators may be serviceable in certain cases and under certain conditions. Although the simplicity of Mr. RAWLINSON'S plan of ventilation cannot possibly be rivaled, it must be remembered that simplicity is a great aid to success in all constructive as well as destructive operations; and that we had better look to the

ventilation of houses already built and occupied than theorise about those not yet designed, cottages and palaces being equally worthy the attention of sanitarians.

But the construction of "wholesome houses" must commence and proceed from below upwards, not from above downwards; and the architectural and engineering theories of the present day are, we believe, much sounder and simpler in reference to the basement and its belongings than to the superstructure.

THE sudden and unexpected, no less than the terrible, nature of the late disaster off Dungeness, could not fail of impressing people, even people manifesting little sensibility in their characters. It was so easy to call up a vivid picture of the scene: every little knot of human beings grouped together on the deck of the *Northfleet*—nay, the contending emotions in each separate individual—represented so many tragedies, and the picture, as a whole, possessed that kind of dramatic unity and power which at once seizes hold of the imagination. Now, when once the reins are given over to our imagination, it requires us to take a firmer grip than ever of the saddle so as not to lose our balance. Of the agony of suspense, of the contagious influence of fear, and of that state of mental and moral tension which even courageous men feel when unexpectedly confronted by a great danger, or when the imminent transition from life to death has to be realised, common life cannot be said to be full. But the sum total of the anxieties, suspense, pains, and miseries daily, if not hourly, occurring in a large city like London, probably exceeds that which occurred on board the *Northfleet*; only forming, as these things do, the common lot of man, they lack dramatic power, and fail to arrest the imagination. But it is not so much on the character of the scene as on some of its incidents that we now desire to dwell. There was a certain interval of time in which to organise and execute arrangements for removing the passengers; but complete anarchy reigned on board the ship. Setting aside the crowd of helpless women and young children startled from their sleep, it seems at first sight difficult to account for the conduct of the navvies—men not without physical courage and dogged determination of character. And heroism is very contagious. The difficulty lies in originating it; but that done, bystanders speedily catch the infection. Now, that Captain KNOWLES must have been a brave man—a man cast in a heroic mould, and with that force of character which puts backbone even into cowards—there can be little doubt. And yet panic took the place of discipline, and with the exception of the ship's crew, who stood to their work right well, we have presented to us the melancholy spectacle of humanity uncovering the lowest and most ignoble part of its nature when confronted with the fear of death.

Of course no amount of introspection will enable a man to prophesy what his actions would be under circumstances such as these. A really brave but modest man would hope that his actions would be worthy of his wishes. He could say no more. A man confronting an unexpected danger is in a condition of unstable equilibrium, and the influence of panic spreads from individual to individual just as a molecular force traverses atoms of matter. It is only an acquaintance with danger, and the self-respect that springs from the mastery of self, or that control which habits of discipline can impart even to the timid man, that will fortify him on occasions of this kind. We know that the "two o'clock in the morning courage" is far different from that which springs from excitement. Of course there is a physiological courage natural and inborn to some men, just as there is an instinctive dread of death in most of us. But physical as well as mental and moral courage may be the result of education to a great extent. A man who will fearlessly ride across country will turn pale in a boat. Uneducated men of powerful physique are notoriously very superstitious. The feeling of utter helplessness and the absence of faith in self among men like navvies on board a ship at sea will render their natures ready captives to the worst fears of their imaginations. Nothing but habits of discipline and firm faith in another's will could have been of any avail under such circumstances. Soldiers are generally helpless creatures on shipboard; but the habit of acting together and of rendering obedience to orders gave to the world, in the case of the *Birkenhead*, the grand spectacle of a regiment acting like one brave man undaunted by the imminent advent of death.

The *Spectator*, in an excellent article on the loss of the *Northfleet*, remarks that the physiological speculations which seem to show that even mental and moral tendencies are inherited make the want of this presence of mind in the face of death displayed by those on board that ill-fated vessel even more astonishing. To most emigrants the dangers of the sea are, however, the same as the fear of ghosts to a child in the dark. Both confront they know not what; and the exaggeration that springs out of ignorance dominates their whole being for the time. The moral is, that true presence of mind comes neither from the display of dash nor the exhibition of what is called pluck, but that it is the offspring of a habit of self-control—of mental, moral, and religious discipline. By this that mastery of self can alone be obtained on which we may hope to rely in the hour of danger and death.

Medical Annotations.

"Ne quid nimis."

FATAL SUFFOCATION FROM NITROUS OXIDE GAS.

A DEATH from the inhalation of nitrous oxide gas occurred at Exeter on the afternoon of January 22nd of this year. The gas was administered by Mr. J. T. Browne Mason, a dentist in Exeter, for the purpose of securing the painless extraction of a large upper molar tooth from a patient under the care of Dr. Pattinson. As this is the first instance of a death from the gas that has been reported upon in this country, the facts are worthy of special record.

The patient, Miss Ida Wyndham, was a lady about thirty-eight years of age. She had recently suffered from a slight cold, but had quite recovered. On January 22nd she went, accompanied by Dr. Pattinson, to Mr. Browne Mason's at Southernhay, Exeter, to have her teeth examined. On examination Mr. Mason found it would be necessary to extract a large upper molar tooth, which from its position could

not be removed without a great deal of pain. At the earnest request of the patient, therefore, it was determined to administer nitrous oxide, Dr. Pattinson discovering nothing in the condition of the patient to prohibit the administration. The gas was supplied from one of the ordinary iron jars into which it had been compressed. Gas from the same source had been administered to other patients without accident, so that its quality could not be impugned, and it was breathed in such manner as to secure a constant supply free of expired air. The lady had neither taken luncheon nor dinner previous to the operation, and Mr. Mason's experience of the administration had been large, extending over the best part of two years, during which time he had administered it sometimes twice or thrice in the day.

At the beginning of the administration Miss Wyndham's pulse became rapid, and Dr. Pattinson thought less full, whereupon, the patient being quite sensible, the inhaler was taken away, and Mr. Mason made an attempt to extract the tooth; but she said she could not bear it, and begged to have the gas again. After a little delay, to enable Miss Wyndham to wash her mouth, the inhaler was reapplied. She took the gas in the usual way, without any symptoms to excite uneasiness. At the proper degree of insensibility the inhalation was stopped and the tooth was extracted. In the operation Mr. Mason was obliged to split the fangs and take them out separately. It was not until after the operation was completed that anything unusual happened, but immediately afterwards the face became livid, and the "features," it is said, "commenced to swell." Mr. Mason hastened to fetch Dr. Drake, who returned with him, and who found the lady still alive. She was sitting in a chair in a half-reclined position before an open window. Dr. Pattinson was by her side endeavouring to restore animation. Her features were livid and swollen, and she appeared to be quite unconscious. She breathed two or three times, and in a few moments after her pulse ceased to beat. All attempts to restore her were useless. Mr. Mason estimated that a volume of six gallons of gas had passed through her lungs.

These are the simple facts of this unfortunate case. They teach a serious lesson, as important as painful. Ruthlessly they destroy the infatuation that the administration of nitrous oxide gas is a harmless process—a process which any man, educated or uneducated, may carry out without danger of destroying life. This lesson must not be forgotten. From no agent have there been so many hair-breadth escapes from death as from this gas; and probably of late some persons every day have been brought within the minutest line of the danger to which Miss Wyndham succumbed. Indeed, a leading dentist told us but a few weeks since that he never operated until the breathing had temporarily ceased. But because through all this risk there has been, it is assumed, no fatal accidents, the administration has gone on in contempt of warning and of obvious danger.

The facts teach another lesson bearing on the cause of death. They show clearly that the assertion, so constantly made, that nitrous oxide gas does not affect the heart, is without foundation, for the first symptom presented by Miss Wyndham under the influence of the gas was rapidity of pulse, with diminution of volume. But the immediate cause of death was clearly paralysis of respiration. There was no obstruction of the air-passages, and the tongue was protruded from the mouth while she still respired; but, as Dr. Drake observed at the inquest, she was as powerless to breathe as though she had been immersed in water.

The most important lesson of all afforded by this painful case is, that we have yet a great deal to learn before we have perfected anæsthesia. Towards such learning the introduction of nitrous oxide has been a serious check. Nitrous oxide, indeed, is not an anæsthetic at all. A true anæsthetic is an agent which suspends common sensibility without, by any necessity, interfering with those organic processes on the continuance of which life depends. Nitrous oxide acts, not in this way, but by suspending for a brief period one of the most important of the organic processes, that of respiration itself. For the reason named, the insensibility produced by the gas is afforded during an interval of partial death. This interval, transient, doubtful, dangerous, may allow an operator time for a short operation, and, the agent away, the suspended function may return. Usually the suspended function does return, more frequently, in truth, than could be expected, but not always, as we now know by lamentable proof.

We cannot conclude this notice without expressing our cordial sympathy with Mr. Browne Mason. We believe the same catastrophe would have occurred whoever had been the administrator of the gas. We feel sure that he did everything that skill, prudence, foresight, and experience could suggest, and we rejoice that the jury was unanimous in their expression of the same sentiment.

INSPECTORS OF NUISANCES.

THE advertisements which now begin to appear numerously from rural sanitary authorities, in respect to the post of inspector of nuisances, show another phase of the unhappy confusion into which almost everything connected with the initiation of the Public Health Act, 1872, has fallen. A common requirement of these advertisements is that the inspector will have "to make a sanitary survey of the whole district, and to furnish a detailed report thereon." One advertisement phrases it, that he will have "to make a perfect sanitary survey of the whole of the district, including the sewerage systems and water-supply of all the villages under the control of the sanitary authority, and report generally on its conditions and requirements." The number of advertisements to the foregoing effect precludes the idea that they emanate from recalcitrant sanitary authorities. They suggest, indeed, that, notwithstanding the Order of the Local Government Board, detailing the duties of an inspector of nuisances, and the different provisions of the Sanitary Acts relating to this officer, the notion has been suffered to grow up largely among rural sanitary authorities that the inspector of nuisances is the proper person to make the kind of survey described in the advertisements. The conception that a person who has no knowledge of diseases and their causation, and whose acquaintance with unwholesome conditions of sewerage and water-supply must almost necessarily be limited to the most obvious nuisance, is the proper person to carry out the sanitary survey of a district, is fatal to all sanitary progress. Unhappily, the notion of the sufficiency of lay knowledge to deal with all questions of sanitary work, not including actually existing disease, seems to have influenced so largely the action of the Local Government Board and of its general inspectors in the initiation of the Public Health Act, 1872, that we cannot be surprised to find rural sanitary authorities acting in the same direction.

THE NAVAL COLLEGE AT GREENWICH.

THE foundation of a Naval College at Greenwich, under the presidency of Admiral Cooper Key, will give satisfaction to the naval profession and restore life to the old halls which have been so long vacant. The new arrangement will not, we are happy to know, in any way interfere with the wing of the hospital occupied by the Seamen's Hospital Society, where the work so long connected with the old

Dreadnought is now efficiently carried out. It is to be hoped, however, that the Admiralty, whilst providing for the mental wants of the new inhabitants of the College, will not forget that their bodies may require some supervision in sickness, and that they are bound to provide medical attendants for the officers and *élèves* of their new institution. But we fear, from information that has reached us, that in this particular the Liberal Government of the day is trying to effect one of the cheap arrangements which are so characteristic of Admiralty doings.

The Naval College at Portsmouth, being in the dockyard, has always been under the medical care of the staff-surgeon in charge of the yard, and the naval medical service, which lost some of its best posts when Greenwich Hospital was abolished, might reasonably expect that a naval surgeon would be placed in medical charge of the new College. We fear, however, that the Admiralty is inclined to fall back upon non-naval help, to the exclusion of its own medical officers. It has in close proximity to the College the Royal Naval Schools, the medical officer of which, though a young and energetic man, must have already more than enough on his hands, and yet it is proposed to give this gentleman medical charge of the Royal Naval College also. Mr. George Armstrong, the present holder of the office at the schools, had considerable experience at the Central London District School at Hanwell before he was appointed to Greenwich, and must necessarily be well acquainted with the disorders of boys of the lower class; but it is inconceivable that the Admiralty should wish to put this gentleman into the false position of having to attend the officers as well as the cadets who will be studying at the Naval College, where from time to time there must arise, in connexion with medical details, questions of discipline with which a civilian must necessarily be unacquainted.

PERSONAL IDENTITY.

SOME of the recent incidents connected with the Coram-street murder, together with the great chronic cause which has occupied our law courts for the last two years, have directed much attention to the question of personal identity, and the almost insurmountable difficulties which occasionally prevent its establishment. The great difficulties which still exist as to the proving or disproving of the identity of the Tichborne claimant should have the effect of making the police very chary of rushing to conclusions as to the identity of suspected persons without very strong corroborative evidence. We heard not long ago of a very curious case of mistaken identity which occurred at one of the London police-courts. A man was convicted of some petty crime, and before passing sentence the magistrate inquired if there were any previous convictions against him. He was answered by one of the warders of the metropolitan prisons that the man had twice before served a term of imprisonment in two separate prisons—A and B. The prisoner at once admitted that he had been imprisoned in A, but stoutly denied that he had ever been in B prison. The prisoner's denial of the latter fact was met by a most positive assertion on the part of the warder, and a photograph was produced in court which proved that the man who had been in B prison not only bore an exact resemblance in general form and features to the prisoner, but that the resemblance extended even to a scar on the face and the loss of a finger. The prisoner continued to deny so positively that he had ever been in B prison that the magistrate remanded him for a week, and before the week was out the truth of the prisoner's assertion was proved by the apprehension of the man who so closely resembled him. For the establishment of identity the most careful and accurate observation is required, the exact anatomical seat of marks and scars must be agreed upon, and the possible effect which age or trickery may have had upon the appearance of such scars, as well as upon the general mental and physical contour of the suspected person, must be borne in mind.

SUCCESSFUL CASE OF CÆSAREAN OPERATION.

THE following case, in which the above operation was successfully performed, in regard both to the mother and the child, is reported in the December number of the *Bulletin Général de Thérapeutique*. Rosalie Rouge, aged thirty-two, rachitic, about 4 feet high (1 m. 28), knock-kneed, became pregnant. The pelvic cavity was 2¼ inches in its sacro-pubic diameter (67 mm.); the promontory was bowed inwards and to the left, and the pubis looked downwards and backwards. At 7 P.M. on August 11th, 1871, labour pains came on. Dr. Severin Caussé, Obstetrical Professor to the Hospice d'Albi, was sent for, and found the neck of the uterus effaced, and that the index-finger could be passed into the interior of that organ. The presenting part could not be distinguished. At 12 the pains were moderate and the bag of the membranes presented. At 7 P.M. these were ruptured. The head was believed to be felt very high in the left occipito-cotyloid position. On August 13th, at 6 A.M., the head had made no advance. A consultation was now held, and it was agreed that the Cæsarean operation should be performed on the following morning, if nature were in the meanwhile unequal to the task of expelling the child. No change occurring, at 6 A.M. on the 14th, fifty-nine hours after the commencement of the labour, chloroform was given. The bladder was evacuated, and an incision made in the middle line, from the left side of the umbilicus to near the pubes. The peritoneum, on being reached, was opened with a probe-pointed bistoury. The uterus, of a rosy-white colour, now appeared, and was divided by an incision parallel to the first. The uterine face of the placenta now came into view. This was rapidly separated, and the infant, which was a female with the head in the first position and living, quickly lifted out. Blood flowed freely from the cut vessels of the uterus. Perchloride of iron and cold irrigation were immediately applied, and the walls of the uterus were also compressed by the fingers. A loop of intestine which presented was returned. Four quilled sutures were passed through the walls of the abdomen. The patient was carefully put to bed with a cloth over the wound, and passed the day with only a little abdominal pain, which, continuing on the next day, was relieved by thebaia. On the 16th, vomiting and indications of peritonitis appeared. Potion de Rivière and frictions with belladonna ointment were applied. On the 18th these symptoms ceased, with a discharge of a sero-sanguinolent fluid from the wound, and from this time forward steady improvement took place, till fifty days after the operation she was dismissed perfectly cured.

THE ROYAL INFIRMARY FOR CHILDREN.

WE regret to learn that the office of surgeon to this well-known institution in the Waterloo-road is vacant under somewhat exceptional circumstances. It appears that Mr. Richard Rendle, F.R.C.S., was elected to the post in 1870, and has held it to the satisfaction of the governors until the last general meeting, when he was not re-elected, though a resolution was carried expressing in eloquent terms the meeting's high appreciation of Mr. Rendle's services!

To explain the reasons for these proceedings, we must inform our readers that the Royal Infirmary for Children is so poor that it cannot provide the necessary instruments and appliances for the surgical treatment of its

patients, and has been in the habit of relying upon the benevolence of successive surgeons (including Mr. Rendle) in this matter. This is the more surprising when we learn that the infirmary enjoys an income of over £2500, and has only twenty in-patients; but it may be noted that the secretary and collector enjoys a salary and commission amounting to more than the entire amount of the annual subscriptions, which were £290 last year. Not content, however, with refusing to provide proper materials for treatment of patients, on Mr. Rendle's having a case of vesico-vaginal fistula in the ward to treat, the committee of an "Infirmary for Children and Diseases special to Women" sent him a notice prohibiting the admission of all cases likely to cause offensive effluvia, notwithstanding the object of the institution and the fact that there were several separate rooms occupied by paid officers or their relatives. This led Mr. Rendle to request permission to inspect the records of the institution, when he received an evasive answer imputing to him improper motives; and, on sending an explanation, he was desired to attend a meeting of a sub-committee which proposed to inquire into *irregularities on the part of the medical officers*. This Mr. Rendle declined to do, though he expressed his readiness to answer any charges that might be brought against him before a general meeting of governors, or even a full committee, with the result that the committee set about altering the laws of the charity so as to make the tenure of office by the medical men subject to annual re-election, and thus got rid of their surgeon.

Looking to the importance of preserving the belief on the part of the public that institutions of this nature are governed on the principle of highest benefit to the patients, and that mere personal interests are carefully excluded, would it not be well for the governors to afford a complete explanation of the circumstances which led to the severance of Mr. Rendle's connexion with an institution which up to that time he had served with great satisfaction?

A CASE OF "ASSAULT."

A CURIOUS case came before the magistrate at the Lambeth Police Court on Saturday last (25th ult). A schoolmistress was summoned by the guardian of a little girl to answer a charge of assault upon the said girl, who was one of her pupils. It seems that the little girl had long hair reaching to her waist; and that the schoolmistress, who had more regard for convenience than beauty, had taken the child to a barber's, and had had the said hair cut short. The schoolmistress alleged that the hair was dirty and difficult to keep clean; the latter half of this assertion being a self-evident fact. The guardian of the child declared that when the child first went to school the hair was perfectly clean. The magistrate decided that the child's guardian should have been consulted before the visit was made to the barber; but, on an ample apology being made by the schoolmistress, he dismissed the case. This is about the slightest form of "assault" that we ever remember to have read of. On sanitary and hygienic grounds the schoolmistress was undoubtedly right. Long waving hair is very pretty, and, when well kept by a nurse or mother who can devote much attention to it, is perfectly harmless, except so far as it prevents that free romping which in children is one of the sure roads to health. If the circumstances of the child are such that several hours in the four-and-twenty cannot be devoted to its toilet, it is certainly better and safer on all grounds to cut the hair as short as possible. If the hair of a child cannot be kept clean with the least possible amount of trouble, the tendency towards the development of "ringworm" and other troubles is thereby so much increased. Supposing the leave of the child's guardian had, in this case, been asked and refused, and supposing the said child had become a centre of infection for the rest of the school, we wonder if the schoolmistress could have recovered damages. It is certainly a great mistake, on moral and physical grounds, to pay too much attention to the personal adornment of children; and we should do well to follow the example of some of our continental neighbours, who obey the dictates of common sense and give all little school children a "close crop."

DANGERS AND DISABILITIES OF LICENTIATES OF THE COLLEGE OF PHYSICIANS, EDINBURGH.

WHAT will Dr. Alexander Wood say to the ruling of Deputy-judge Mulcaster in the Durham County Court, that a general practitioner practising medicine on the strength of the licence of the Edinburgh College of Physicians, and surgery on the strength of the diploma of the Faculty of Physicians and Surgeons, is not entitled to charge for medicines. Rather, that because he supplied medicines and seemed by the sum claimed to have charged for them, he violated the law. His Honour's expressions were—"If a man practises as a physician and surgeon he cannot practise as an apothecary." "I think that the plaintiff had a right to charge as a physician, but he has practised as a general practitioner." "I hold that you have charged as an apothecary, and had no right to do so, and have subjected yourself to a penalty from the Apothecaries' Company." "I decide against you." "You are an irregular practitioner." The plaintiff naturally was excited, and used some expressions which he had better not have used. But it is perfectly marvellous to see how the Medical Act is being construed by county court judges. This is the second judgment that seems to contradict the plain words of the Act of 1858, which has been so much boasted of as putting on one and the same footing all qualifications of the same kind throughout the kingdom. We regard the decision as contrary to the law, and most unjust in its bearing on the plaintiff and all who hold the same diplomas. Here is a man who has passed two of the recognised boards of the country, and is told that he has not the power to practise but as a physician!

UNCLAIMED BODIES IN IRISH WORKHOUSES.

THE *Clonmel Chronicle* gives an account of a curious investigation by W. J. Hamilton, Esq., into the merits of a complaint by Mr. Thomas Laffan, surgeon to the Cashel Union Infirmary, against the master of the workhouse, for not allowing him to make a post-mortem examination on the body of an inmate, Patrick Welsh, an aged beggar, notwithstanding that the deceased had during his lifetime executed a will in which he left his body to Mr. Laffan. The will was instigated by the doctor, with the honourable motive of examining the lungs of the poor beggar, which were affected by gangrene. There was no attempt on the part of Mr. Laffan to deny this, and it was candidly confessed that, by way of the more effectually getting the will executed, the doctor promised to have a mass said for Patrick, and to have him buried in the Rock. Most patients would perhaps rather not be consulted beforehand on such matters, but it may safely be concluded that the conditions of the proposal gave the good old Irishman more pleasure than the nature of it gave him pain, and the master of the workhouse should have respected the will. Even apart from the will, in the absence of friends, the doctor's wish in such matters should be law. So far is this from being the case, that unclaimed bodies are the property of the master, and his permission is necessary before a post-mortem can

be made. This is a monstrous rule of the Irish Local Government Board, and we urge that it be immediately altered. The existence of it is disrespectful to the medical profession, and necessitates a course on the doctor's part which ought not to be necessary. We should recommend the Irish Poor-law officers to make a unanimous representation on this subject to the Local Government Board.

BALMFORTH V. BUCKLEY AND FLETCHER.

THE last and most gratifying scene of this well-known case of action for alleged malpractice was enacted on the 21st January, when, at a meeting held at the Clarence Hotel, Manchester, for the presentation to the defendants of a purse collected by their professional brethren towards defraying their necessary legal expenses, Dr. Royle, who took the chair, almost congratulated Dr. Fletcher and Mr. Buckley on the annoyance to which they had been exposed, since it had given their friends the opportunity of expressing their good-will in a tangible form. With his remarks on the individual responsibility attaching to every member of the medical profession we most fully agree.

The following sentence in a letter from Sir James Bardsley was read on the occasion:—"It seems to me an objectionable precedent for one medical man to support, by his evidence in a court of justice, a charge of malpractice made against another of his brethren." We cordially echo this sentiment, but it must be remembered that occasionally eminent men are (much against their will) dragged into the witness-box under the powers of a subpœna, owing to their having inspected and given an opinion concerning a patient before they were aware that his case was to form the ground of litigation. Under such circumstances a surgeon is to be pitied if his conscientious opinion happens to go against his medical brother; for an astute examiner is certain to make the most of his unfavourable opinion, however fairly it may be stated. In all cases of dispute, in fact, between medical brethren, there is a fine opportunity for the exercise of that charity which "thinketh no evil."

THE TIVERTON INFIRMARY.

WE trust that the discord of this institution is in a fair way of being removed. The committee appointed at a special meeting convened to consider the matters complained of by the four honorary medical officers who resigned, have reported in favour of the following changes, among others, in the rules, which, we understand, will be acceptable to the honorary medical officers:—

"That a new rule to follow Rule 39 be passed to the following effect:—'That the hon. medical officers shall have the privilege of introducing any articled pupil to witness the practice carried on in the institution, for the purpose of receiving instruction in his profession, provided that no such articled pupil to any medical practitioner be admitted to or take part in the practice of the institution, except in the presence of some one or more of the honorary medical officers.'

"That after Rule I. of the rules as to the house-surgeon and dispenser, this addition or new rule be made:—'That on any vacancy in the office of house-surgeon and dispenser, the applications of all the candidates received after three advertisements in a leading medical journal shall be referred to a special committee composed of the hon. medical officers only, who shall report upon the qualifications and eligibility of the candidates to the General Committee for such General Committee to select from, and that no candidate shall be appointed against whose eligibility such special committee shall report.'"

It is to be hoped that the General Committee will accept this report. The changes seem to be very moderate and commendable.

PEPTIC ACTION OF THE PYLORIC GLANDS.

CONSIDERABLE difference of opinion exists amongst physiologists in regard to the action of the secretion formed by the glands of the pyloric region of the stomach. On the one hand, Fick and Friedinger consider that their secretion has no digestive properties, whilst, on the other, Ebstein and Grützner maintain that it possesses in a very high degree the power of converting albumen into peptones. V. Wittich has just published in the last part of Pflüger's *Archiv* (i., 1873) the results of his investigations, which coincide with those of Fick, and are opposed to those of Ebstein. V. Wittich does not think the weight of albumen dissolved can be taken as a measure of the amount of pepsin in the fluid, since a disproportionately small quantity of pepsin will dissolve an inordinately large amount of albumen. He is rather disposed to rely on a comparison of the rapidity of action as a means of estimating the amount of pepsin present, the temperature and other conditions being alike; and his experiments performed on pigs and rabbits have satisfied him that in these animals at least the pyloric glands furnish no pepsin.

AN OLD OFFENDER.

AT the last meeting of the Wandsworth District Board of Works the chairman is reported to have called attention to the fact that enormous heaps of dust had been deposited on the ground adjoining the Southwark and Vauxhall Water Company's filter-beds, reaching high above the fence erected to prevent the dust from blowing into the Company's premises. Moreover, from the works going on, the chairman was afraid that the heaps were intended to be made higher, and we read that he expressed a sincere hope that the officers of the board would prevent the nuisance going further. Considering that this "nuisance," as the chairman very properly describes it, was deemed of sufficient importance to be mentioned in Parliament last year, and to be subsequently made the subject of proceedings before a magistrate, the question naturally arises, why the Wandsworth Board of Works has allowed itself to be beaten in the matter? That the presence of this dust-yard in close contiguity to the works of one of our large water companies is a "nuisance" of a serious character, affecting as it does the thousands of South London inhabitants who have to drink that Company's water, there can be no doubt. As little question can there be that either the water company or the district board, or both together, ought long since to have taken such proceedings as would have effectually made an end of the nuisance. We trust that the "sincere hope" which the chairman of the district board seems to entertain that something will be done, is destined to speedy fruition. The Board has surely now had plenty of time to find out how to proceed so as to avoid being beaten on a mere technicality.

PANIC IN COMPLAINTS OF THE BLADDER.

L'Union Médicale of Jan. 25th states that the death of the Emperor of the French has caused a kind of panic with many people suffering from derangement of the bladder, and adds that one of the oldest and most respected statesmen of France has just fallen a victim to this exaggerated fear. Baron Dupin was in his eighty-ninth year. Like many aged men whose urinary organs are somewhat out of order, and who on the news of the calamity that befell the Imperial family became very nervous about their own health, he set about sounding himself. For this purpose he used an elastic catheter which had belonged to his brother, and the soundness of which he probably did not test. When this instrument had passed under the symphysis it

broke, and a fragment the length of a finger remained in the deeper portions of the urethra. An old friend of the Baron was called in, but failed to extract the fragment. A second surgeon was sent for, but when the latter arrived the broken piece had lodged in the bladder. The patient now had a shivering fit, and further attempts were postponed, but he breathed his last before the operation could be undertaken.

NEW USES FOR A BURIAL-GROUND.

WE understand that the good people of Islington are indignant at an unseemly proceeding with which they are threatened. There is a piece of disused land at Islington known as the New Bunhill-fields burial-ground. This, it would seem, has been recently purchased as a speculative building scheme, with the avowed intention of erecting a number of houses upon it. To say nothing of the desecration of the dead, there are, as regards the living, sanitary objections of the gravest nature to be urged against a procedure of this kind being carried out. We do not wonder at the opposition shown by the Islington Vestry to such a measure, and we cordially trust their endeavours to frustrate it may prove successful. The subject is now before the Metropolitan Board of Works, who have referred some legal points to the solicitors of the Board concerning the terms under which the ground was closed in 1858 by an order of Privy Council, and as to the claims of those who bought graves in perpetuity, which it is alleged have never really been rescinded, but only held in abeyance. Even should the solicitors decide that the Board has any jurisdiction in the matter, the ground is obviously, we should think, unfitted for building purposes on the score of public health. The disturbance of a soil containing so many dead bodies would be a nuisance and a very probable source of danger.

ACCIDENTAL SYPHILITIC INOCULATION.

CASES of accidental syphilitic inoculation in members of our profession have unfortunately been frequently recorded. Some have suffered very severely, and others have met, by the sad occurrence, with an untimely grave. In a memoir of M. Guersant, the eminent surgeon so long attached to the Hospital for Sick Children, recently read before the Surgical Society of Paris by M. Féréol, it is stated that the subject of the memoir was wounded in the right index-finger whilst operating upon a patient suffering from syphilis. The disease at once settled upon Guersant; he suffered from iritis, and subsequently had an attack of hemiplegia, which yielded to appropriate treatment. These ailments, however, undermined his constitution, and he at last died of cerebral congestion preceded by albuminuria.

THE GENERAL MEDICAL COUNCIL.

THE Executive Committee of the General Medical Council met on Thursday, the 23rd January, when it was arranged that the General Medical Council will hold its session on Wednesday, March 12th, and following days. The Executive Committee will meet on the 11th March, to arrange the programme of business.

THE LOCAL GOVERNMENT BOARD AND THE OLD CLEVELAND-STREET WORKHOUSE.

AT a meeting held on Tuesday night, in the St. James's Vestry Hall, Piccadilly, a resolution was passed against the contemplated order of the Local Government Board to add the Cleveland-street Strand Union Workhouse to the Highgate Infirmary, for the reception of the sick poor of the Central London Sick Asylum District. We are pleased to learn that the deputation which waited on Mr. Stansfeld on the following day took vigorous exception to the proceeding of the Board, and elicited from the President a promise that he would carefully consider the points which had been brought under his notice before the final order was issued.

REVIVAL OF THE DEAD LANGUAGES.

IT is a curious fact that, just as the members of Convocation of the University of London have decided that Greek is an essential of polite education, one of the Gresham lecturers has been confronted by an audience of *savants* who have demanded a lecture in the Latin tongue. Last Saturday, we understand, the Very Reverend the Dean of Manchester discoursed in Latin on the subject of geometry, to an audience composed of three gentlemen and one lady, the latter, we believe, having an appointment at Gresham College as "charwoman" to that ancient foundation.

DIPHTHERIA NEAR OXFORD.

A SHORT report on a prevalence of diphtheria at New Hincksey, near Oxford, has just been presented to the Local Government Board by Dr. Thorne Thorne. The outbreak commenced in May last, and resulted in nine deaths, which were recorded in the Registrar-General's return for the quarter ending September, 1872. At the time the inquiry was made no information of any scientific value as regards the origin of the disease could be ascertained. It appears, however, to have spread mainly by direct infection, and to have occurred under very bad sanitary circumstances. There is a probability that before long the locality will be incorporated with Oxford, of which city it forms a suburb.

THE HOSPITAL SUNDAY MOVEMENT.

NOTTINGHAM has just held its Hospital Sunday, and the collections at places of worship realised about £850, to which must be added £150 contributed by the working men on the previous Saturday. The population of the town is under 90,000, or about one-fourth of that of Birmingham. The subject of a Hospital Sunday for Southampton was mooted by Dr. Griffin at the annual meeting of the dispensary in that town, held last week, and a resolution was unanimously adopted in favour of steps being taken for its institution.

CONVALESCENT HOSPITALS.

AT a meeting of the General Committee for the relief of distress in the manufacturing districts, held at the Manchester Town Hall on Monday last, Lord Derby delivered an admirable address on "Convalescent Hospitals." It is proposed by the Committee to spend £30,000 in establishing hospital buildings, containing not less than sixty beds, somewhere between Blackpool and Lytham, the sum of £100,000 being kept available for further extension and maintenance of the establishment.

THE Common Council of Glasgow have not the excuse of emulating the noble and economic spirit which animated a similar body further north some years ago, who, on account of the temporary scarcity of water, passed a resolution that each member should drink his whisky "neat." An enormous quantity of water appears to have been used in Glasgow last year, the average daily supply being 32,400,000 gallons, and greatly in excess of the supply for previous years.

MR. THOMAS SMITH has been appointed Surgeon to St. Bartholomew's Hospital, in the vacancy caused by the death of Mr. Coote. We understand that Mr. Howard Marsh will be appointed Assistant-Surgeon in Mr. Smith's place.

THE Regius Professor of Medicine at Cambridge University, Dr. Henry W. Acland, proposes to have a class for clinical instruction at the Infirmary on every Saturday, at 10 A.M., commencing on Feb. 15th. The Professor will on one or more days, to be hereafter arranged with his class, demonstrate on the spot sanitary defects in a village or town, illustrating thereby the principles of general and sanitary administration. In the laboratory of the medical department of the museum subjects connected with sanitary science (including demonstrations regarding adulteration of food) will be taught, as heretofore, by the deputy of the Professor, C. C. Pode, M.A., M.B., of Exeter College.

IT has become an interesting problem how far the chain of progression can be carried in the adulteration of coffee. It is now many years since THE LANCET first drew attention to the practice of mixing chicory with the ground berry. We now learn that chicory is depreciated to a large extent with scorched rye. In another year or two we shall probably hear that the rye is adulterated, and the mind gets bewildered in speculating as to what the terminal process will be. With geophagie on the increase, however, it will not stop at dirt.

DR. SARVIS, who was lately elected public analyst for the Bethnal-green district, appears to have electrified the vestry of that parish a few days ago by asking for a microscope of the value of £22, one accomplished member of the board stating that "he had a laboratory which cost 20s. where he could do anything." Another vestryman stated that Mr. Quekett's microscope cost only £2. A committee of seven will "sit" on the question of their medical officer's requirements.

THE annual meeting of the governors of the German Hospital, Dalston, was held on Monday last at the London Tavern. It appeared from the report read that during the past year 1211 in-patients and 15,805 out-patients had been treated at the institution. Dr. Port was elected assistant-physician, *vice* Dr. Bäumler, appointed to a professorship in the University of Erlangen.

AT a meeting of the Metropolitan Asylums Board, held on Saturday, the 25th ult., it was decided, on the application of Dr. Ascher, of the Jewish Synagogue, that in future all Jewish imbecile patients should be kept at the Leavesden Asylum. This step will facilitate visitation of such patients by members of the persuasion.

THE rejections at the College of Surgeons, Ireland, a few days since, for the first half of the examination for the diploma in surgery, amounted to seventeen out of twenty-four candidates. This result seems to have arisen more from the ignorance of the candidates than from the difficulty of the examination itself.

ACCORDING to the *Dublin Evening Mail*, Mr. Alfred Power, C.B., is about to retire from the Vice-Presidency of the Local Government Board, and will be succeeded by Sir John Gray, M.P. for Kilkenny.

DR. GAMBERINI, in the *Revue de Thérap. Méd.-Chir.*, speaks highly of the volatile oil of celery in amenorrhœa, and cites three cases in which the effect of the oil was remarkably good.

THE Prussian Government lately called attention to the presence of trichinæ in hams imported *viâ* Bremen from the United States, and warned purchasers from dealing in them.

DR. F. JOLLY, a German physician, states that in the course of two years he had met with two deaths from the use of hydrate of chloral. The dose in each case was below the average, and the chloral was chemically pure.

THE total number of deaths from cholera in the army throughout the Bengal Presidency during the past year was 562, being more than 50 per cent. of the seizures.

M. JUNGFLEISCH has now succeeded in preparing tartaric acid, by complete synthesis, from artificial succinic acid obtained from bromide of ethylene.

THE Council of the Metropolitan Hospital Sunday Fund will hold its first meeting this day (Friday) at the Mansion House.

YELLOW FEVER is so prevalent in Rio de Janeiro that quarantine has been established in all the ports on the River Plate.

DR. A. PORTER, Assistant-Surgeon, Madras Army, has been elected a Member of the Royal Irish Academy.

THE habit of opium-eating is now described as being almost universal in Rajpootana and Central India.

PROFESSIONAL SKETCHES.

II.—THE GENERAL PRACTITIONER.

THE 20,000 men who constitute the medical profession in the United Kingdom are, for the most part, general practitioners; and it would be difficult to name a body of men who have more responsible work to do, or whose efficiency is of so much consequence to the community. They realise, imperfectly, no doubt, but to a great extent, the wholeness of the healing art, as one full of resources for the relief of all kinds of disease, external and internal. Other classes of practitioners ignore half the diseases of the human body, or two-thirds or five-sixths of them; but the general practitioner can refuse no case of suffering that comes to him. For a time, at least, he must be the sole adviser. Be it a case of hernia, of impassable stricture, of fracture; or of pneumonia, or even of arterio-fibrosis, whatever that may turn out to be, he is the first person appealed to, and generally has sole charge of the case long enough to impress the patient with his insight or with his want of insight into disease, with the possession of a greater or a less amount of the "healing art."

His long and intimate relation to his patients is quite a different thing from that which obtains in the case of the consulting practitioner, and naturally gives rise to a much more varied knowledge of cases. The consulting practitioner, especially if he be eminent or fashionable, has only a few minutes to devote to each case. General practitioners are often told by patients that they were disposed of by this and that eminent physician or surgeon in fewer minutes than the number of the months, or perhaps years, over which their symptoms have extended; for disease that takes men to physicians is generally an extended thing. Happily "that long disease my life" is an expression which few are entitled to use. But often there are facts in the history of patients which are only ascertained when the medical attendance has mellowed into a form of friendship, and which are very important to a right understanding and still more to a cure or a relief of symptoms. One advantage of the mode in which the general practitioner comes by his

knowledge is its quietness. There is something formidable in the cross-examining, book-keeping style of seeing a patient which the careful and younger physician adopts, and which he is compelled to adopt if he really wants to know and to remember all the bearings of a case. But the general practitioner has recurrent opportunities of ascertaining all the principal facts in an almost incidental sort of way. At his visit to-morrow he can perfect the information which he has got to-day. We hold it difficult to overrate the value of this advantage to the general practitioner. Though disease is not a thing which occurs in an isolated way, though appearing a thing of yesterday only, it has often far back relations to the previous diseases and the original constitution of the patient and of the patient's family; yet the less the patient's knowledge of these relations the better. So long as he is told all that is necessary to protect the weak parts of his system, and to remedy the parts at fault, the less his mind is set to study the relations of his disease to his constitution, the more isolated he thinks disease to be, the better. Emphatically here, with the qualifications stated, "ignorance is bliss." Hence the more quietly the history of his health is ascertained the better. And it is the advantage of the general practitioner that he comes to know about his patient gradually and quietly. There is a scientific advantage in the position of the general practitioner. He can follow cases from beginning to end. He sees the success and the failure of remedies. By various consultations in difficult cases with different practitioners of standing, he comes to know their views of disease and the methods by which they detect and treat it. In this way, if he is wise, he makes the experience of other men his own. Moreover, he is in a position to find out, if not more of the natural history of disease, at any rate more of the individuality of cases, and, by a larger experience than that of the consulting physician of the freaks of disease, to guard against too dogmatic an opinion of its course and consequences.

If we think much of the advantages of the general practitioner as regards his chances of a more extended and intimate observation of cases, we are fully alive to his disadvantages. The chief of these is a temptation to slovenliness and slightness of observation. Many practitioners have too many cases—that is, a far larger number than they can give any leisurely consideration to; and the visit is apt to degenerate into short talk about the leading symptoms and the state of the bowels—a part of the body important, no doubt, but which has been subjected to an inquisitorial treatment strangely disproportionate to the investigation into the rest of the system. Other practitioners who have not too many patients have too much time, and the consultation here is apt to degenerate into a chat on the state of the weather, or the religious difficulty of the School Board, or the rival merits of Mr. Disraeli and Mr. Gladstone. Not that we do not like the family doctor to be human and kindly all round, and even to exercise a quiet influence on the next election of guardian or member of Parliament. But it will nearly always be found that a practitioner's political and personal influence is in pretty direct proportion to his professional standing and reputation. We desire that the profession should wield more influence over society and legislation, and the general practitioner must be chiefly looked to for this great purpose; but he himself must look mainly to the perfecting of his own character. Every addition to his accomplishment as a practitioner gives him additional weight in the community.

When we speak of the general practitioner of medicine of the present day, what a variety of characters and of lots do we include. Here is a practitioner who guides the health of a few well-ordered and well-to-do families in London or a large provincial town, whose illnesses seem to be as orderly and decorous as themselves, who never send at inconvenient hours, and never ring the night-bell. Their doctor is a happy, regular, and withal an elderly man, who leaves his door as the clock strikes 10, and who may be relied on for being in at 2 to lunch and 6 to dinner, and whom one would not be sorry to dine with. There is a younger man, with a growing family gathering about him, who has just given up the parish, and is anxious to make a corresponding addition to his private practice, who cares little for his meals, so long as he gets his cases well and sees his way to educating his boys and girls. Here is a new practitioner, full of all the energy of youth and the latest learning of the schools; impatient to try his hand, and thinking honestly enough that he could do better in a few cases with his new resources than the established men about him; honourably exercised between the tendency to "make by force his merit known" and that "sublime repression of himself" which is one of the great professional virtues. There is a practitioner, whose diplomas date far back and are few and ordinary—only those "of the College and Hall,"—but whose many aptitudes and long career of honour and usefulness have made him a consultant in the eyes of the public. Yonder, in a remote village, finely out of the reach of railways, is a practitioner with the honourable M.D. degree appended to his name, who has learned to sleep in his saddle, and holds himself in equal readiness for a summons to attend a labourer's wife at the foot of the Cheviots or one of the lordly proprietors of the neighbouring castles.

Under cover of all this variety of duty is the same general practitioner bound ever and anon by the force of circumstances to be a special practitioner. Old things have passed away: the apothecary, who made mysterious and costly draughts, and did obsequious obeisance to the physician with the gold-headed cane; the barber-surgeon, who bled, &c.; the bone-setter; and half a dozen other "specialists" of the dark ages,—have passed away and given place to the fairly-educated, independent, earnest, general practitioner of 1873, who realises the wholeness of the medical art as exemplified alike by Hippocrates and Celsus. No men have the consciousness of having a more noble calling nor one more calculated to make men noble. They do not get so much gold, or figure so largely in history, as the members of other professions may do. But they get enough—Robert Levett's competence—

> "The modest wants of every day
> The toil of every day supplied."

They seldom are made the subject of biographies; but now and again there rises up a prophet among men who makes known what the judges think of them, in words like those we lately quoted from a great living critic: "Many of us looking back through life would say that the kindest man we have ever known has been a medical man, or perhaps that surgeon whose fine tact, directed by deeply-informed perception, has come to us in our need with a more sublime beneficence than that of miracle-workers."

LONDON INTERNATIONAL EXHIBITION, 1873.

THE second meeting of surgical and orthopædic instrument manufacturers was held last Monday, at 29, St. James's-street, Mr. Louis Blaise in the chair.

It was unanimously resolved that the revised conditions proposed by Her Majesty's Commissioners should be accepted, and that the majority of instrument makers would exhibit.

A committee was then elected to carry out the necessary arrangements.

THE AUXILIARY AND RESERVE FORCES CIRCULAR.

WE are glad to be able to produce the following extracts from the above circular—dated War Office, January 1st, 1873—for the information of medical officers of the Reserve Forces:—

Certificate of Proficiency.—Medical Officers of Volunteers.

CLAUSE 10.—1. Paragraph 43, Clause 9, Auxiliary and Reserve Forces Circular, 1872, referring to the compulsory examination of officers, does not apply to medical officers. The examination fixed for these officers by Section 5 of Clause 31 is not compulsory, but is prescribed in order to enable medical officers, if they should desire it, to obtain certificates of proficiency, and thus earn for their corps the special capitation allowance of £2: 10 under Clause 29.

8. The words in parenthesis in the first paragraph of the certificate of proficiency (War Office Form, 855) given at page 96 of the Auxiliary and Reserve Forces Circular, dated May 28th, 1872, will be struck out, and the following substituted: "who is registered under the Medical Act of 1858 as qualified to practise medicine and surgery in Great Britain and Ireland."

Medical Attendance.

CLAUSE 13.—1. An allowance of twopence per week for each person in aid of medical attendance will be granted on account of the permanent staff and their families. This allowance will be paid by the adjutant to the medical attendant, and charged in his accounts. The charge must be vouched by the adjutant's certificate of the actual number of persons for whom the allowance is strictly chargeable, and by the receipt of the medical attendant, whether he be the medical officer of volunteers or a private practitioner.

4. Clause 43 of the Auxiliary and Reserve Forces Circular, 1872, is cancelled.

Correspondence.

"Audi alteram partem."

FORCIBLE FEEDING.

To the Editor of THE LANCET.

SIR,—I should not intrude upon your columns with any further remarks upon the forcible administration of food to the insane, had it not happened that a letter on the same subject from Dr. Lawes Rogers, has given rise to much misapprehension as to my views. I did not reply to him at once, the error he had made appeared so obvious that I thought I might leave it unnoticed; but I find several friends, in whose asylums the stomach-pump is used, approve Dr. Rogers's letter, have not detected the mistake he has made, and really believe that I consider the stomach-pump an instrument of torture.

In my own practice I use instruments for feeding with great reluctance, but almost always the stomach-pump. In recent cases, and in those where there is much resistance, I prefer to try Esquirol's plan of feeding, rather than force asunder the jaws with an iron lever. If the mouth can be opened, of course a stomach-pump of fitting calibre is, in careful hands, the best treatment.

In my recent remarks I strongly deprecate a mode of feeding by passing a tube as far as the fauces, and then injecting fluid into the pharynx, as even fatal spasm of the glottis may thus be induced, and the pain inflicted is intolerable.

This simple statement has been strangely and carelessly, though doubtless innocently, altogether perverted by Dr. Rogers. He writes:—"Dr. Tuke speaks of the passage of the tube through the fauces as causing intolerable pain." He goes on to state that he has passed a stomach-pump down his own throat, and found it a painless operation; he hints with truth that I have never done the same thing. He further instances the case of an orderly in his regiment, who, when suffering from pharyngitis, preferred the stomach-pump injection to the pain of swallowing. These facts he adduces as substantial evidence that the operation does not cause "intolerable pain."

Dr. Rogers further says that he is content to leave it to the profession whether in feeding by the nostril or the mouth the "moral effect is *most* satisfactory." He implies that I instituted such a comparison. I did nothing of the kind, but if I had I should certainly have written "*more*," and not *most*. He does not allow me even to be grammatical.

It is obvious that Dr. Rogers has read my remarks without understanding them, quoted them without caring to be correct, and has adduced evidence to disprove a statement that has never been made.

I pass over entirely Dr. Rogers's rebuke as to imputing "ignorance or malice *to us others* (*sic*) who" prefer to feed through the mouth rather than the nostril. I have shown that he has misunderstood and misquoted my observations. I can afford to overlook a charge that is so easily proved to be founded on a misapprehension.

I am, Sir, your obedient servant,

Albemarle-street, January, 1873. HARRINGTON TUKE.

TREATMENT OF TALIPES VARUS.

To the Editor of THE LANCET.

SIR,—I have been advised by Dr. Little to publish a small addition to the treatment of talipes varus which I have found useful. In the latter stages of the treatment of this deformity the slipping backwards and upwards of the heel is often very embarrassing. Even after free tenotomy the treatment is often hindered and delayed by it in restless children, and it is not easily prevented by any of the various modifications of Scarpa's shoes with which I have been supplied. A very simple arrangement in bandaging does, however, entirely prevent this slipping of the heel. After the bandage has been applied in the usual way to the foot and ankle, a broad tape or narrow bandage should be passed over the front of the ankle, round the limb, and crossed behind it just above the heel, then carefully sewn to the bandage on each side below the malleolus to prevent its slipping, as shown in the drawing.

When the foot thus prepared is put into the shoe, the ends of the tape will come out in front of the heel-piece, and should be tied tightly under the side. It will be seen that this strap opposes the action of the instep straps of the shoe, and if all these are sufficiently tight the heel is held firmly down to the side of the apparatus. This complete fixity of the heel is the great desideratum, both as regards obtaining flexion of ankle, eversion of foot, and unfolding its distortion. So that the surgeon who can accomplish this has overcome his greatest difficulty. This plan is especially applicable to the large class of more or less relapsed cases in which re-operation is often resorted to—one of the "unnecessary operations" of Dr. Little. Cases of this kind, which formerly I should scarcely have attempted to treat without re-operation, have been, I may say, rapidly cured since I have adopted this simple means, availing myself also of the advantage of Dr. Little's double-hinged lever instrument with thumb-screw movement, which gives the patient the benefit of a stop-joint, set at any angle required.

I am, Sir, yours, &c.,

Windermere. FREDERIC CLOWES.

PLUGGING THE POSTERIOR NARES.

To the Editor of THE LANCET.

SIR,—In plugging for epistaxis, one frequently finds anxiety arise from—1st, the difficulty of retaining the posterior plug without causing more or less expulsive action of the larynx; 2nd, the great liability of the hæmorrhage coming again upon removing the plug. With anterior and posterior plugs I have always succeeded for the time being in restraining the flow; but when all has ceased and the patient requires to be relieved of them, frequently have I found hæmorrhage to commence afresh.

In Mr. Godrich's method a tube is passed, and to me it appears liable to disturb the parts upon its removal, and be a means of renewing that which one had tried to stop, more so than the single thin piece of twine that is often used. Patients I have observed generally breathe through the mouth for a short time after, where it has commenced, and this of itself is of no great importance, if only due to a clot.

I am, Sir, your obedient servant,

Brixton, January 20th, 1873. ARTHUR H. MORRILL.

THE INCOME TAX.

To the Editor of THE LANCET.

SIR,—In answer to a "Country Doctor," I beg to state that the National Anti-Income Tax League (the offices, &c., of which will be seen on reference to the advertisement in this paper) is working steadily for the end in view. It purposes holding a meeting in the West-end about the middle of next month, on the same basis as that held in December last at the Guildhall. There are already country associations formed in Bath, Bristol, Birmingham, Hull, Exeter, Worcester, Portsmouth, &c., which are in frequent communication with London. Meetings are being organised in many of the large towns, and the League publishes on the 1st of February a circular, which will appear fortnightly, and which will keep the public posted in its operations. The League is non-political, and invites aid from all classes; and I venture to think that we shall not look in vain for aid to the medical profession, which appears from information to have special grounds for complaint against the tax. I am satisfied that it only wants energy on our part, and support from the general public, to obtain the repeal of a tax which, if not most vigorously opposed, will ere long become permanent. All information, the verbatim report of the Guildhall meeting, &c., may be obtained on application to the secretary.

I am, Sir, very faithfully yours,

RICHARD ATTENBOROUGH,
Chairman of the Executive Committee.

Duke-street, St. James's, January, 1873.

BIRMINGHAM.

(*From our own Correspondent.*)

THE Town Council, after much discussion, have prudently decided, by a very large majority, to continue the policy and extend the powers of the Sewage Committee. Middens will now be abolished, and the interception plan will be carried out in its entirety on some such system as has been adopted in Rochdale. The Council will after this be able to go before the Vice-Chancellor with good grace, and to show him that they have not only done their best to abate the nuisance complained of by Sir Charles Adderley and others, but also to improve the health of the poorer inhabitants of the town.

Typhoid fever is not increasing either in Moseley or Balsall-heath. In the former place a special committee of six gentlemen has been formed for the purpose of improving its sanitary condition. At Balsall-heath the waterworks company have been ordered to supply the district with their water at the public cost, from eight stand pipes placed in various convenient situations. Mr. John Darwen, one of the oldest parochial surgeons of Birmingham, has been appointed medical officer of health at a salary of £50 per annum.

The death-rate in Birmingham is at present 20·4. The only epidemic at all prevalent is scarlatina, and that is not producing a high mortality.

The medical staffs of the General and Queen's Hospitals have, after deliberation and much mutual concession, concocted a scheme by which, in future, the practice of the two hospitals will be amalgamated, and by which students will, for a common fee, have an opportunity of enjoying as wide an amount of clinical experience as can be gained anywhere, except in the royal hospitals of London. Students will have access to about 500 beds, and will be able to compete annually for about twenty free resident clinical appointments in the two hospitals; all the clinical appointments are to be made after an examination conducted by a clinical board, composed of three members of the staff of each hospital, with a co-optated chairman to decide all questions of difference that may arise. This scheme will probably be of considerable advantage to the students, and will tend to give greater importance to the Birmingham School of Medicine.

Birmingham, Jan. 25th, 1873.

LIVERPOOL.

(*From an occasional Correspondent.*)

THE expression of regret contained in your issue of last Saturday at the lamented death of our member, Mr. S. R. Graves, is most sincerely echoed by all members of the profession here, by whom the deceased gentleman was most deservedly esteemed. It would be impossible, in a short notice such as this must be, to give an idea of Mr. Graves's services in the cause of charity and benevolence; but one circumstance may be mentioned which occurred during his year of office as Mayor of Liverpool in the year 1861. The Royal Infirmary and Northern and Southern Hospitals being at that time heavily in debt, a sum of £8000 was, by the deceased gentleman's energy and influence, raised, which sufficed to free them all from debt and gained them some new supporters. On the 1st October, 1869, Mr. Graves presided at the opening of the winter session at the Royal Infirmary School of Medicine, and during the following year took much interest in the proposed Bill for regulating the granting of licences and diplomas, having personal interviews and correspondence with members of the profession here. One of his last acts was to preside at the annual meeting of the Northern Hospital, which was held on the Tuesday preceding his death, and although (as it subsequently transpired) he then complained of headache and of feeling overworked, no one who had seen his tall, stalwart frame, or watched him as he walked along the street, could have guessed that the end was so near. The news of his death was indeed at first received with incredulity, but when it became apparent that it was only too true, the greatest sorrow was manifested everywhere, and the sad and terribly sudden event was the absorbing topic of conversation in all circles.

The amount realised by the Hospital Sunday collections has now reached upwards of £8100, while the Hospital Saturday boxes have this year yielded the sum of £1300. A few more items have yet to be added, but £9500 may be considered as the result of both appeals this year. The amounts apportioned to the different charities will probably be known in the course of a few weeks.

Liverpool, Jan. 28th, 1873.

ABERDEEN.

(*From our own Correspondent.*)

DURING the past two months the health of Aberdeen has been unusually good, with the exception of some cases of scarlatina and diphtheria, not sufficiently numerous to warrant the use of the term epidemic. Zymotic diseases have been present, but to a very limited extent. The mortality from this class of diseases has accordingly fallen to less than half the usual figure, and as these always bulk

largely in the returns of the total mortality, the latter has been thus considerably under the average. The occurrence of this lull in epidemics at the present time is fortunate, as it will enable the changes now going on in the hospital accommodation for fever to be carried out without inconvenience or discomfort. Until a few months ago the fever accommodation consisted of a house situated a short distance behind the General Hospital, and parallel to the main building of it, which house was divided into four wards, and was intended to receive about thirty patients. These wards, however, were not of sufficient size, and, from the situation of the building, did not admit of that thorough ventilation which is so necessary for the successful treatment of cases of fever; and, accordingly, the whole building has now been removed, and the space which it occupied converted into an open airing ground. This will doubtless improve the ventilation of the General Hospital, which will thus be thrown open on all sides. To replace the wards pulled down, four new ones have been constructed in two detached houses, nearly in line with the wings of the General Hospital, but separated from it by a considerable interval. These new wards are large, airy, and well-ventilated, and are intended to accommodate from fifty to sixty patients. Two are now completed and in use, and the other two are rapidly approaching completion. Had it not been for the present lull in epidemic disease, and consequently the very small number of cases of the kind now under treatment, some difficulty would no doubt have arisen from the circumstance that the old building had to be pulled down before the new wards could be thoroughly completed; but, fortunately, the number of patients under treatment has been so small, generally about half a dozen, or, at the outside, eight or ten, that the two wards presently in use (which are adapted for about thirty) have been sufficient, not only for the reception, but for the effectual separation of all the cases that have offered themselves; and there is every probability that the other two wards will be ready against any possible increase which the advance of spring may bring.

Aberdeen, Jan. 18th, 1873.

PARIS.

(From our own Correspondent.)

THE *Gazette Hebdomadaire* has a very important article on the late illness and death of the Emperor Napoleon which it is well worth sending to you, as it is one of much interest and is written in a fair and scientific spirit. "We have remarked," says the author of the article, "such precipitation in the judgments formed by the non-medical press touching the causes of the Emperor Napoleon III.'s decease that it has become difficult to establish a clinical judgment on the operation which was followed by death. However, on examining the principal features of the case, and the conclusions of the post-mortem, it does not seem that we have to deal here with extraordinary facts. A man of sixty-four years, fatigued, and even exhausted, perhaps, by excessive vicissitudes of fortune, affected with stone for several years, suffering from lumbar pains and from disorders of micturition, undergoes lithotrity. He has shivering, falls into a state of coma, and dies in a few days. At the post-mortem, advanced renal lesions, some of them old, others of more recent date, are discovered. If it were an ordinary patient, the registering would be simply: 'Lithotrity in a calculous subject affected with pyelo-nephritis; death;' and it would perhaps be added that cutting or crushing would probably have been attended with the same result; so that the fact proves nothing as to the choice of one or the other operation. But in this case there is a talk of sudden collapse and arrest of the heart's action, and for a while all the causes of death in an operated subject would be discussed in connexion with the case. Some accuse chloroform, three days after the operation, as causing death; others, even still more adroit in seizing an opportunity for recommending their own anæsthetic, insinuate that had ether been employed, lithotrity would have succeeded better. So that a serious mind does not feel the need of offering fresh explanations of a fact of this sort, unless we eventually manage to get a detailed account of the case, such as would certainly be exacted for a well-observed case in one of our *cliniques*. We earnestly hope that for the honour of the British medical body a complete history of this operation, now become celebrated, will be given to us one day." I have given you a translation of part of the *Gazette Hebdomadaire's* article. As you will see, the author wisely divests the case of all the wild, unscientific, and almost supernatural statements and explanations by which it had been surrounded here, but declares himself not satisfied with the imperfect details which until now have been brought before the medical public. Meanwhile, and in a fair spirit, he reserves his judgment, and considers the case to be quite an ordinary one.

Yesterday the *Société Protectrice de l'Enfance* held its annual public meeting in the large hall of the Conservatoire des Arts et Métiers. The meeting was presided over by Dr. Béclard (who is a member of the Municipal Council of Paris), assisted by Dr. Mial and Charles Laffitte, the celebrated banker. The provincial societies were represented by several delegates. Dr. Béclard opened the proceedings of the day by a brilliant discourse, in which he related the growing prosperity of the society, which had been founded for the most useful object of the protection of childhood. It now numbers more than 1200 members, and during the past year it had had 1700 children under its surveillance. Out of this number 573 were under the age of one year, and there had been only sixty deaths, making ten per cent., whereas the mean average of deaths stated among the new-born children sent from Paris to be nursed in the provinces was fifty-two per cent. This simple comparison sufficed, said the President, to show the invaluable services which the society was rendering. Dr. Linas, the secretary, then read a report on the annual prizes of the society. A medal worth £20 was given to Dr. Duberisson for his Essay on Rachitism, Dr. Redfrey, one of the provincial *surveillants* of the association, got a gold medal for his zeal and devotion, and what constituted perhaps the most interesting part of the day's proceedings, several wet-nurses were called forward to receive rewards for their exceptional care and devotion to nurslings.

The Municipal Council has just bought an immense extent of ground at a small distance from Paris, so as to relieve the city cemeteries, which are getting overcrowded.

At a recent meeting of the Academy of Sciences, Dr. Vulpian read a very important paper, containing the results of his researches on the cord of the tympanum. Contrary to what had been admitted until now, Dr. Vulpian shows that this is a motor nerve which sends nervous filaments to the tongue.

A special commission is now busy in visiting the cellars of all the houses situate near the banks of the Seine, so as to prevent the occurrence of any epidemic from the effects of the recent extraordinary inundations of the river.

Paris, Jan. 28th, 1873.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examinations for the diploma, were duly admitted Members of the College on Jan. 23rd and 24th:—

Barnard, Charles Edward, Hobart-town, Tasmania.
Barrow, Albert Boyce, Newmarket, Suffolk.
Bateman, Lewis Philip, Dudley, Worcestershire.
Brigham, Henry George, Stanley-street, Pimlico.
Chinery, Charles Warner, Lymington, Hants.
Clark, Frederick Chessman, L.S.A., Croydon.
Clyma, Handsford Hosking, L.S.A., Redhill, Surrey.
Coke, William Harriott, Tottenham.
Copeland, William Lowry, M.D. Ontario, Canada.
Dodd, Alexander Russell, Westbourne-terrace-road.
Elliot, Norman Bruce, L.S.A., Denmark-hill.
Gibbs, Robert, Brompton.
Gibson, Henry C. M., Truro, Cornwall.
Griffin, Charles Thomas, Ledbury, Gloucestershire.
Kingscombe, Alfred Partridge, L.S.A., Ivybridge, Devon.
Lewis, Frederick William, L.S.A., Llandovery.
Mitcheson, Joseph Hopkins, Edmonton.
Moss, Robert Campbell, Stifford, Essex.
Murray, William, M.B. Univ. Dub., Limerick.
Nicholson, Arthur, Newark, Notts.
Padman, John, Notting-hill.
Palmer, Montagu H. C., L.S.A., Newbury, Berks.
Parkhouse, Henry, L.S.A., Braintree, Essex.
Payne, Henry Peter, Southampton.

Peregrine, Hugh Ley, Half-moon-street, Piccadilly.
Recklit, William B., Birmingham.
Richards, G. Pickering, L.R.C.P. Lond., Bury-st., St. James's.
Rogers, Edward Coulton, Modbury, Devon.
Skinner, Robert Alexander, Camden-road.
Spurgin, W. Henry, Thrapstone, Northamptonshire.
Wallis, William, L.S.A., Hartfield, Sussex.
West, Row and Hill, Chippenham, Wilts.
Wilkinson, Auburn, L.M. Durham, Tynemouth.
Williams, William Henry, Tavistock, Devon.
Wilson, Wm Wright, Acock's-green, Birmingham.
Wood, Henry Thorold, Onslow-square, Brompton.
Yeates, William Michaelson, Birmingham.

Of the 110 candidates examined on Jan. 21st, 22nd, 23rd, and 24th, 26 failed to satisfy the Court of Examiners, and were referred to their professional studies for six months.

APOTHECARIES' HALL.—The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on Jan. 23rd:—
Jordan, John, Birmingham.

As Assistants in Compounding and Dispensing Medicines:—
Andrews, William Lestham, Aldborough.
Worthington, William, Preston, Lancashire.

At the Preliminary Examination in Arts held at the Hall on Jan. 24th and 25th, 29 candidates presented themselves, of whom 12 were rejected, and the following 17 passed and received certificates of proficiency in General Education:—

FIRST CLASS (in order of merit).—1. Daniel Philip Meadows. 2. John Poland. 3. Leonard Charles Wooldridge. 4. Millice Culpin.

SECOND CLASS (in alphabetical order).—E. A. Aldridge, F. G. Baker, E. S. Dyer, N. S. Foster, W. Haydon, S. A. Hayman, F. M. Heygate, C. G. Hutchinson, Thomas James, G. Leigh Lye, A. W. Pearson, A. P. Powell, and Gregory Stock.

DR. ROBERT S. MARTIN, of Kemerton, has received from the Local Government Board an award (the third) of £7 14s. for the efficient state of public vaccination in his district.

MR. S. W. BROADBENT, M.R.C.S., South Hetton, was recently presented with a testimonial, on the occasion of his completing the twenty-third year of his practice in the district.

CAMBRIDGE has lost her scientific Nestor in Dr. Adam Sedgwick. For more than half a century he was the inspiring genius of natural, as distinguished from physical and mathematical study. He was an intrepid vindicator of the teleological argument; but, when the evolutionist theory came forward, he was too old to grapple with it. The revival of medical study at Cambridge owes him indirectly a deep debt of gratitude.

THE guardians of the West Ward Union, Westmoreland, having received a letter from the Local Government Board requesting to be informed what course the authorities of the union intend to pursue with respect to the provision of adequate and suitable accommodation for the destitute poor, have replied that a committee had been appointed to view another site for a workhouse, the circumstances of which would in due course be submitted for the consideration of the Board.

BEQUESTS, ETC., TO MEDICAL CHARITIES.—Mr. T. W. Hill, of Bristol, handed to the Committee of the West of England Sanatorium, upon his eighty-fourth birthday, the last instalment of his contribution of £2000. The Victoria Hospital for Sick Children has received £500 under the will of Mrs. Jane Lyon, of Albert-terrace, Knightsbridge. The East London Hospital for Children and Dispensary for Women has received £500 under the will of Mrs. Lyons. The Glasgow Convalescent Home has received £500 under the will of Mr. Alexander Mitchell, leather merchant, of Glasgow.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The usual Quarterly Court of the Directors of the Society was held on January 8th, in the rooms of the Royal Medical and Chirurgical Society, 53, Berners-street. The chair was taken at eight o'clock by the President, Dr. Burrows. Fifty-five widows and thirty-four children applied for assistance from the funds of the Society. A sum of £1218 10s. was voted to be divided according to the wants of the respective applicants. The expenses for the quarter amounted to £57 17s. 4d. A legacy of £100, duty free, was announced as having been received from the executors of Martin Ware, Esq., late President. The death of R. Strong Eyles, Esq., one of the treasurers, was reported by the secretary.

Medical Appointments.

BALDING, M., M.B., has been appointed Physicians' Assistant to the Middlesex Hospital.

BELLAMY, E., F.R.C.S.E., Senior Assistant-Surgeon to Charing-cross Hospital, has been appointed Surgeon to the Royal Infirmary for Children and Women, Waterloo-bridge-road.

BIRD, W., M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the Bunbury District of the Nantwich Union, vice Foulkes, deceased.

CALLOW, W. T., M.D., L.R.C.P.Ed., has been appointed a Consulting Physician to the Hospital for Consumption and Diseases of the Chest, Liverpool.

CLARKE, E., M.B., M.R.C.S.E., has been appointed Consulting Surgeon to the Worcester Dispensary, on resigning as Surgeon.

CLARKE, J. C., M.B., M.R.C.S.E., has been appointed Junior House-Surgeon to the Bolton Infirmary and Dispensary.

DAVIES, G. A., L.R.C.P.L., M.R.C.S.E., has been appointed Resident Medical Officer to the Infirmary and Dispensary, Newport, Monmouthshire.

ENGLAND, R. E., M.B., C.M., has been appointed House-Surgeon to the Whitehaven and West Cumberland Infirmary, vice John Shannon, L.R.C.P.Ed., L.F.P. & S.Glas., resigned.

GEE, R., M.D., M.R.C.P.L., has been appointed a Consulting Physician to the Hospital for Consumption and Diseases of the Chest, Liverpool.

HARDYMAN, C. E., M.R.C.S.E., has been appointed Resident Medical Officer to the Macclesfield General Infirmary.

HAYES, A. E., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the East District of the Belford Union, Northumberland, vice Magill, resigned.

HAYES, T. C., M.R.C.P.L., has been appointed Physician-Accoucheur to Out-patients of the General Lying-in Hospital, York-road, vice Palfrey; and Physician to the Royal Infirmary for Children and Women, Waterloo-bridge-road.

HORNIDGE, G. J., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Tyrrellspass Dispensary District of the Mullingar Union, Co. Westmeath, vice North, resigned.

NEWBY, C. H., M.R.C.S.E., has been appointed Resident Clinical Assistant at the Victoria-park Hospital for Diseases of the Chest.

PARNELL, G. C., M.R.C.S.E., has been appointed House-Surgeon to the Worcester General Infirmary, vice C. E. Hardyman, M.R.C.S.E.

POORE, G. V., M.D., has been appointed a Physician to the Royal Infirmary for Children and Women, Waterloo-bridge-road.

REEVE, E., M.R.C.S.E., has been appointed Medical Officer for District No. 5 of the Aylsham Union, vice Alderton, resigned.

ROBERTSON, R., M.D., has been appointed a Physician to the Hospital for Consumption and Diseases of the Chest, Liverpool, vice R. Gee, M.D., appointed Consulting Physician.

SAMUELS, A., M.D., has been appointed a Physician to the Hospital for Consumption and Diseases of the Chest, Liverpool.

SERJEANT, E., L.R.C.P.L., M.R.C.S.E., has been appointed Senior House-Surgeon to the Bolton Infirmary and Dispensary.

TYRRELL, Dr. T. P., has been reappointed Medical Officer for the Newbridge Dispensary District of the Naas Union, and Medical Attendant to the Royal Irish Constabulary at Newbridge and Milltown.

WALDO, H., M.B., M.R.C.S.E., has been appointed Surgeon to the Provident Surgical Appliance Society, Broad-street-buildings.

WILLIAMS, D. M., L.K.Q.C.P.I., has been appointed a Physician to the Hospital for Consumption and Diseases of the Chest, Liverpool.

YATES, W. P., M.R.C.S.E., has been appointed an Honorary Medical Officer to the Jersey General Dispensary and Infirmary.

Births, Marriages, and Deaths.

BIRTHS.

BAYNES.—At Courtland-terrace, Kensington, the wife of Wm. W. Baynes, M.R.C.S.E., Deputy Inspector-General of Hospitals and Fleets, of a daughter.

CONSTABLE.—On the 25th ult., at Lambeth-terrace, Lambeth-road, the wife of Joseph J. Caffry Constable, M.D., of a son.

KNAGGS.—On the 22nd ult., at Highgate-road, the wife of S. H. Knaggs, M.R.C.S.E., of a son.

LYLE.—On the 17th ult., at Westmorland-terrace, Newcastle-on-Tyne, the wife of Robert Lyle, M.D., of a son.

SIMPSON.—On the 22nd ult., at Fairlie House, King Edward's-road, South Hackney, the wife of T. G. Simpson, L.R.C.P.Ed., of a daughter.

MARRIAGES.

BROWN—SETON.—On the 23rd ult., at Pitmedden, Udny, Aberdeenshire, David Dyce Brown, M.A., M.D., of Aberdeen, to Eliza, eldest daughter of Sir Wm. Coote Seton, Bart., of Pitmedden.—No Cards.

CHRISTIAN—PADDISON.—On the 28th ult., at Arkesden, J. Griffith Christian, M.R.C.S.E., to Elizabeth, youngest daughter of Henry Paddison, Esq., of Wood Hall, Arkesden, Essex.

HEDLEY—WILLIAMS.—On the 23rd ult., John Hedley, M.R.C.S.E., of Yesterhouse, Middlesbro', to Mary Elizabeth, eldest daughter of Edward Williams, Esq., of Cleveland Lodge, Middlesbro'-on-Tees.

DEATHS.

BISHOP.—On the 21st ult., W. H. Bishop, M.R.C.S.E., of North Malvern, formerly of Worcester, aged 60.

BODKIN.—On the 23rd ult., T. Bodkin, M.R.C.S.E., of Park Villas, Selhurst-road, South Norwood.

HALL.—On the 22nd ult., at Surrey House, Sheffield, Susan, the wife of Dr. J. C. Hall.

JACKSON.—On the 19th ult., Fanny, the wife of J. Jackson, L.F.P. & S.Glas., of Birmingham.

THOMSON.—On the 21st ult., Thomas Thomson, M.D., of Leamington.

WIGG.—On the 29th ult., at West Villa, Southminster, Essex, Adela Marie, infant daughter of Thomas Carter Wigg, M.R.C.S.E., aged 3 months.

Notes, Short Comments, and Answers to Correspondents.

THE SULPHOVINATE OF SODA.

THE sulphate of soda and the citrate of magnesia are favourite saline purgatives in France; but we now find that M. Rabuteau proposes the sulphovinate, for which he claims the following advantages:—1. The sulphovinate purges with relatively small doses: a little less than half an ounce is ample; half the dose is enough for children and sometimes for adults. 2. The number of evacuations varies according to the amount used. Five drachms in three tumblers of water occasion four or five stools; with six drachms the evacuations may be from seven to eight. The action commences in about an hour. 3. The sulphovinate is the mildest of saline purgatives, probably because it is not exclusively a mineral salt, as sulphate of soda. Its use is not trying to the stomach, and, on the contrary, relieves abdominal pain, especially in diarrhœa, which it quickly relieves. 4. This salt, being a type of dialytic purgatives, may be prescribed for menstruating or pregnant women. 5. Thanks to the absence of taste and a saccharine after-taste, the most nervous persons and even children will readily take it. 6. The salt in question is more agreeable than the citrate of magnesia, especially when dissolved in Seltzer water, nor is it likely to give rise to calculous concretions. It is well known that magnesian salts should not be used continuously; nor would any practitioner prescribe even citrate of magnesia to old men, or to such patients as suffer from catarrh of the bladder, as the formation of a stone of the triple phosphate might thus be easily excited. The salts obtained with sulphovinic acid had, as far back as 1870, been experimented by Rabuteau, and no mention of the sulphovinate of soda had since been made, except in his "Elements of Therapeutics." In this book the author states that when alcohol is carefully treated by sulphuric acid, so that the mixture may not become heated, a new acid is obtained—viz., the sulphovinic or ethyl-sulphuric. $C_2H_6O + H_2SO_4 = H_2O + (C_2H_5)HSO_4$ (2).

Sulphovinic acid.

The salts derived from this acid were studied by Marchand some forty years ago. The sulphovinate of barytes is perfectly soluble in water, whilst the sulphate of the same base is insoluble in the same liquid. This difference is taken advantage of to obtain most of the sulphovinates, and especially the sulphovinate of soda.

Olecranon.—We believe that the appointment rests with the officer commanding.

THE DRUITT TESTIMONIAL FUND.

MR. HAYNES WALTON, the Treasurer, begs to acknowledge the receipt of the following sums since Wednesday, the 15th of January:—

Mr. Alfred Brooks ...	£10	10	0	Mr. C. Greig, Clifton... ...	£1	1	0
Dr. Andrew Clark	5	5	0	Dr. Minter, Southsea ...	1	1	0
Dr. Marion Sims, New York	5	5	0	Mr. A. B. Squire	1	1	0
Mr. Thorn	5	0	0	Dr. Wilkinson	1	1	0
Dr. G. Buchanan...	2	2	0	Dr. A. Wiltshire...	1	1	0
Mr. H. Bullock	2	2	0	Dr. Fraser	1	1	0
Mr. W. Druitt, Winchester.	2	2	0	Professor Tuson...	1	1	0
Rev. C. J. Ackland	2	2	0	Dr. Tidy	1	1	0
Lady E. Cornwallis	2	0	0	Dr. Northcote Vincen... ...	1	0	0
Mr. Greenway, Plymouth...	1	1	0	Mr. Christopher Buckle ...	0	10	0

Subscriptions may be sent to the Treasurer, Mr. Haynes Walton, 1, Brook-street, Hanover-square; the Secretary, Mr. A. T. Norton, 6, Wimpole-street; or may be placed to the account of the "Druitt Testimonial Fund," Union Bank, Argyle-place, Regent-street, W. Amounts received will be acknowledged in the medical journals.

P.R.C.S.E., (Peebles.)—Thanks for the communication extracted from the *Scotsman* of the 24th ult.; but what it means is more than we can discover. Mons. de Septeuils, it appears, removes a worn-out stomach, and replaces it by a bran new substitute! The procedure ought not to be allowed to stop where it does. A busy dyspeptic patient, with whom time is money, cannot afford to stay while his stomach is undergoing repair in this way. He should leave it like his watch, and call in a day or two. Many years ago a paper appeared in *All the Year Round*, entitled "Skitzland," an incident in which our correspondent may remember. The occupant of the box-seat on a coach is described as leaving his stomach at some place or other, to be called for subsequently, and he does not take the trouble to dismount, but throws it down! M. de Septeuils only appears to have yet succeeded in removing the diseased part by operation and carbolised ligatures.

Enquirer.—The custom is for the new-comer to call.

GEOPHAGIE.

To the Editor of THE LANCET.

SIR,—With regard to geophagie, the subject of an interesting special article in THE LANCET of Dec. 7th, 1872, Mr. Wallace, so well known for his researches in the Malay Archipelago, mentions in his "Travels on the Amazon and Rio Negro" (p. 310) the case of a little Indian boy, who died at Guia, on the Rio Negro, from the effects of this strange appetite, which is stated to be a very common and destructive habit among Indians and half-breeds in the houses of the whites. The boy had been physicked, whipped, and locked up, but all to no purpose; the very mud-walls of his prison supplying him with the means of gratifying his vicious propensity. The symptoms of the concomitant disease were swelling of the whole body, face, and limbs, so that the victim could but with difficulty walk.—Yours, &c.,

January, 1873. J. C. G.

"PHYSICIANS AND GENERAL PRACTITIONERS."

WITH reference to a paragraph in last week's LANCET, with the above heading, "Physician" writes to us as follows:—

I have received a communication from "A General Practitioner," identifying him with the paragraph in last week's LANCET, headed "Physicians and General Practitioners," and asking to be furnished with any explanation I can offer. Looking upon the matter as one that ought to be dealt with publicly, I have written to "General Practitioner" to state that his answer would be sent for insertion in the ensuing number of THE LANCET. According to the paragraph in question, "A General Practitioner was attending a gentleman in a suburb of London for jaundice, &c. A few hours after his visit one day the gentleman came to town, and being seized with great pain, on the advice of a friend, consulted me. I was informed of the 'General Practitioner's' attendance, and of his visit that very morning; but took no notice of the fact, entirely ignored the practitioner, and instructed the patient to see him again in ten days." THE LANCET is asked for an opinion of the behaviour of the physician, and thinks very badly of it, adding, "We regret to say that many letters come to us, making a similar and most just complaint," and further remarking that "the physician was fully justified in prescribing in the emergency; but there was great vanity and discourtesy in disregarding the general practitioner—vanity in supposing that one prescription written upon the strength of once seeing the patient would serve for ten days without other medical advice, and discourtesy in not recognising the medical practitioner in attendance, who probably knew more of the case than the physician." To the charges made I have to reply that the account given by "General Practitioner" is a mistake almost from beginning to end with regard to the facts as far as I was concerned. The patient came an entire stranger during my consulting hours in the morning, gave in his name in the usual way, and in his turn was shown into my consulting-room. I have a perfect recollection of the patient's case from the memoranda contained in my note-book, and from its being one that excited my interest. The patient gave a history of attacks of biliary colic extending back over a period of two years and a half. Latterly he had been jaundiced for five weeks, but had not experienced the pain which had occurred in his former attacks. He was also suffering from a chronic form of dyspepsia. Not deriving any benefit from the medical treatment he had previously received, he had been advised, he said, by his friends to consult me. I can distinctly state that nothing was said about the patient having been seen by "General Practitioner" the morning of his visit, and there was nothing to give the slightest aspect of urgency about his state, nor anything to lead me to think that his visit was other than a pre-arranged step. I (vain man!) must plead guilty to having had the vanity—after a careful investigation of the patient's general condition, accompanied with a physical examination of the chest and abdomen, analysis of the urine, and an inspection which led to the discovery of an anal fissure, which was evidently the source of the patient's chief bodily trouble, and the existence of which had been overlooked, according to his account, by others—to suppose that his prescription would serve without other medical advice for ten days, accompanied as it was with the proviso that the patient should come earlier if the anal fissure, the touching of which with the finger during the examination had thrown him into great pain, should require it. The patient did return, not in ten, but in seventeen days, and told me that he had continued his prescription till then, as he had found more benefit from it than had ever been conferred upon him before. I must also plead guilty to having been discourteous enough not to recognise the claims of "General Practitioner," of whose existence in connexion with the case or otherwise I was totally unconscious until his note was received, and his name turned to in the Directory. I cannot help writing under the sting of annoyance that I should have been compelled to waste my time in vindicating myself from such a trumped-up charge.

W. B.—Balfour's, or, better still, Bentley's Botany; Reay Greene's Protozoa and Cœlenterata; Deschanel, or, perhaps better, Tait and Thomson on Natural Philosophy.

Æquo Animo.—1. If there are reasonable grounds for suspicion, our correspondent had better lay the matter before the local magistrate.—2. There can be no difficulty in selecting an instrument from the price-lists of makers to suit our correspondent.

THE communication of *Dr. R. E. Hoeppell* (South Shields) has been received, but its publication would not interest our readers.

J. R. W.—We believe the qualifications are necessary under the new system.

THE "MEDICAL LIST."

To the Editor of THE LANCET.

SIR,—On November 7th, 1872, I received through the post a printed circular, to the effect that a new "Medical List" for the coming year was in course of compilation, and that the publisher would be happy to receive subscribers' names. So I filled up the subscription form, and enclosed a post-office order for the price of the work. The return post brought the following written receipt:—

"45, Euston-square, N.W., Nov. 8th.

"Received six shillings, subscription, Medical List for 1873.

"WM. LONGMAN."

This Directory was to be issued on the first day of the New Year; but no sign of it has as yet appeared, and some three or four letters to the publisher have produced no reply or acknowledgment.

It would be interesting to know if any other gentlemen have subscribed to this work, and, if so, whether they have or have not received their copies.

I am, Sir, yours, &c.,

January 23rd, 1873. T. I. P.

Mr. P. D. Farquharson, (Castle Carey.)—1. The papers that appear annually in the Army Medical Blue-book will probably afford the information.—2. Yes.—3. A battery of 25 cells costs about £7, and the cost of one of 50 cells is about £12 or £13.

A. W. B.—We do not forward private answers. Our correspondent should consult some respectable practitioner, and avoid all advertising quacks.

Catheter would be entitled to charge two guineas a day.

THE UNITED STATES SIGNAL SERVICE.

THE Americans are both energetic and thorough in anything they undertake. The United States Signal Service Bureau has rapidly risen to great and deserved importance. The chief officer, General Albert J. Meyer, is a physician by education, who during the civil war was placed at the head of the Signal Corps. In that position he rendered great service, and developed a remarkably complete system of signals. The present service was perfected by direction of the Secretary of War, under an Act of Congress, providing such stations, signals, and reports as might be found necessary for the benefit of agricultural and commercial interests throughout the United States. It now consists of a school of instruction, a central office at Washington, and stations over the country at such points as will enable the observers to note accurately the varying conditions of temperature and the progress of storms. The central office at Washington is in telegraphic communication with all the stations, and each night reports are received at eleven o'clock P.M., and the results of the digest are telegraphed to all the principal cities in time for the morning papers. The weather predictions of the Bureau have been verified in a very considerable degree, and the number and value of the "cautioning" signals on the inland lakes and on the sea-coast are generally recognised. The operations of the service have been largely extended by the co-operation of the Canadian authorities, and negotiations are in progress designed to furnish signal reports from the West India islands and even from Europe.

THE SOLVENT TREATMENT OF CALCULI.

To the Editor of THE LANCET.

SIR,—Having at intervals for fifteen years devoted much time to the study of the solvent action of remedies in the treatment of gravel and calculi, and having since April last paid almost exclusive attention to the subject, I was glad to see THE LANCET's leader on it, and think that no little credit is due to its Editor for specially directing the attention of the medical profession to the solvent treatment of calculi. The article in last week's number was all the more necessary, as since Napoleon's death *The Times* has told the world that "hopes have long been practically abandoned" *of* dissolving stone; and certainly a ready writer may well be pardoned for disseminating that statement, for what has hitherto been written upon the subject seems to have been ignored in practice. Hence the sentence in THE LANCET for Jan. 25th, that the "solvent method of treatment merits more attention than it has received," is very opportune. It is only to be regretted that it should be necessary for an Emperor to succumb in order to bring the solvent plan into due prominence.

Hitherto this mode of treating cases of calculi has not had a fair chance. We have long given dilute mineral acids for phosphatic and alkalies for uric acid deposits; we have also tried solution of vesical calculi by weak acid or alkaline injections, but after a short trial have too often become discouraged by apparent want of efficacy in the means employed, or the patient, being relieved, has become tired of the prolonged treatment, and after a period of comparative ease has ultimately had to submit to an operation, and thus solvent remedies have, undeservedly, met with but scant justice.

In the first place, I do not think that the primary cause of gravel or calculi is often resident in the urinary system; the original cause is probably attributable to the teeth, stomach, duodenum, liver, and pancreas; much animal food and a too active digestion, with insufficient exercise, will render the blood too acid; while impure air, imperfect digestion, and consequent malassimilation of food is apt to cause the blood to be neutral or even alkaline. According to the reaction of the blood, so will be that of the urine. If the blood be excessively alkaline, acid urine will not be secreted from it; if neutral or acid, the urine will be acid unless changed by vesical disease.

Again, I do not attribute the apparent failure of solvent agents to want of power to effect the desired end. In hard-water districts, as was first clearly shown, I believe, by Dr. Harley, and hinted at by many other writers, the drinking-water has a much greater effect upon the character of the urine than has hitherto been recognised, and in certain constitutions will cause deposits in the urine. In these cases it is vain to expect benefit from solvents while the patient continues to use for his food and drink the same water to which he has been accustomed; for the daily amount of earthy salts is often sufficient to neutralise the mineral acids taken, and thus only prevents the patient from becoming worse without effecting a cure.

I would therefore respectfully suggest that the solvent method be properly tested in one or more large hospitals. Let a certain number of patients be put under an acid or alkaline course of treatment, according to the kind of gravel or calculi, and let them have only distilled water in all their food and drink; let the treatment be continued sufficiently long, watching carefully the result, and the value of solvent remedies would soon receive a solution.

Since the beginning of last April I have confined calculus patients to the use of distilled or soft water, and have found the solvent plan effectual when so assisted, although very tantalising before. After using distilled water it is quite a common event for a calculus patient to pass one or more water-worn calculi after the second month of treatment.

The late Emperor Napoleon's case seems sufficiently clear. For six years he was a prisoner. Want of light, air, and exercise induced indigestion and anæmia; his blood therefore could not be otherwise than excessively alkaline; hence intercurrent deposits of oxalates and phosphates. When on the throne, from anxiety and frequent hæmorrhoidal fluxes, his system was never fairly above par, or if it did make an effort to rise above, the attempt was rendered nugatory by his favourite Vichy water. The Emperor's state of system was always, therefore, eminently favourable to the formation of renal calculi, and from the evidences I think he must have been afflicted with many during the last twenty-five years, all of which passed except the fatal one. At Chiselhurst every circumstance was only too favourable to its rapid growth. Both ureters being dilated, one, perhaps many calculi must therefore have passed down each; hence MM. Sée, Nélaton, Ricord, Fauvel, and Corvisart, and also Sir Wm. Gull, were doubtless correct—the French surgeons, that the Emperor suffered from the rational signs of stone before the war; and Sir William, that the nucleus of the imperial calculus may have been but of recent formation.

Yours truly,

Newcastle, January, 1873. JOHN C. MURRAY, M.D.

THE HISTORY OF MEDICINE.

NUMEROUS inquiries have been addressed to us as to the disposal of the magnificent collection of MSS. and books in medical literature left by the late Dr. Daremberg. May we suggest to our correspondents that it would be well for them to form a committee and a fund for its purchase? Once let the movement be "set on wheels," and we doubt not that a sum sufficient to secure the collection as a "concurrent endowment" to a Chair of Medical History in one of our schools would speedily be forthcoming.

A Third-year's Student.—It has no advantages over the other qualification mentioned, although the bye-laws of long-established medical charities sometimes contain a stipulation that the holder of a medical office should possess the qualification in question.

Dr. A. T. Watson's (Dresden) paper on "Hermaphroditism" shall receive attention.

A. L. O. E.—There is no prohibition against our correspondent dispensing his own medicines; but he could not recover the value of the medicine s in a court of law.

X. X., (Barrow-in-Furness.)—We know of no works of the kind.

MORBID PROCESSES IN MUCOUS MEMBRANES.

To the Editor of THE LANCET.

SIR,—My sole object in addressing you is to clear up and explain a physiological fact. All mucous membranes are subject to two distinctive actions—congestions and inflammations. All the former are known by the large amount of secretions at particular places. The old-fashioned colds of heavy secretions in the Schneiderian membrane of the nose and running at the eyes come under the name of catarrh—a term not so much in use as it was thirty years ago. Tracheal congestions, bronchial congestions, in which the secretions with some disintegrative condition of the membranes, are sometimes enormous. The mucous membrane of the bladder also takes on these actions, and we know the state by the passing of immense quantities of mucus and degenerated mucous membrane, and call it "catarrhus vesicæ." It has been an unfortunate creed, both medically and physiologically, that these states are consecutive to inflammatory actions, which is really not the case. All inflammatory actions of membranes are specified by the name always ending in "*itis*"—thus, *tracheitis*, *bronchitis*, *muco-enteritis*, *cystitis*. Anyone having had experience in these cases will always find that there is a deficiency of secretion in the mucous membranes in these states. The irritable cough in *tracheitis* is thus reduced to a mechanical action of the air impinging on dry or an insufficiently moistened state of the mucous membrane there. Such is the same with distinctive *bronchitis*. In both cases the expectoration is infinitesimal, and what there is, is of that peculiar character where nature is endeavouring to secrete a protective mucus upon the membranes, but cannot fix it, and so it comes away as soon as it is formed. Look again at scarlet fever, which seems to have cleared away all the protective mucus throughout the alimentary canal, and the characteristic appearance of the red beefy tongue shows the same to be the state of the whole alimentary tract. See how long it takes before these membranes in either locality recover a proper degree of integrity. Therefore I do think that the creed of the congestive states as sequences of inflammatory ones should at all events be not only suspected, but really refuted. Great and sudden congestive actions may be by nature herself relieved so actively that she leaves the membranes suddenly bare, and inflammatory actions supervene as a result. This is distinctly seen in the few days preceding scarlet fever, when the tongue is inordinately loaded and coated, and in sometimes less than twenty-four hours is beefy red. Not only does this take place inside, but similar phenomena outside also, as is shown after a certain number of days by the exfoliation of the skin.

Sir William Gull says in the late post-mortem of the Emperor Napoleon: "I desire to express the opinion that the phosphate-of-lime calculus which formed the nucleus of the mass was the result of prior cystitis (catarrhus vesicæ), and not the cause of it."

I may here observe that pure cystitis, or inflammation of the membranes of the bladder, is a very rare disease; whilst catarrhus vesicæ, a congestive disease of that organ, is very common, and in its incipient forms comes and goes without leaving any distinctive state of disintegration of the mucous membranes. But where it becomes a specific disease is in cases of neglected strictures, when the bladder is often imperfectly emptied of its urine, which becomes retained and decomposes, and known by its strong ammoniacal smell. But I must distinctly and emphatically deny that catarrhus vesicæ is ever the cause of stone or calculus of any character whatever.

I have at this very time two gentlemen whom I have attended, the one for fourteen, the other for twelve years, and both with catarrhus vesicæ. The one will bring a common wide-mouthed preserving bottle with his daily urine, and, on standing, the lower three-fourths will be degenerated mucous membrane and mucus. Sometimes he will be better, and again worse. Owing to Sir W. Gull's observations read by him in *The Times*, he called upon me on the 14th inst. to know if he had stone or calculus, and if his kidneys were affected. He had no calculus whatever, and no doubt, from a long sympathy of the kidneys with the bladder and ureters, his kidneys may not be sound or perfectly healthy; and as he looks almost as well as he did fourteen years ago, and is now sixty-two years of age, it shows that catarrhus vesicæ as a local affection does not affect life.

The other gentleman, a captain in the army, I sent to one of our first surgeons about a fortnight since to sound him for calculus, and he found no trace of one; but there was double stricture. Sometimes this gentleman's urine is most offensive when he has not been able to empty his bladder of it; and his wife tells me that every morning the servant is obliged to get a kettleful of water, and with a short pointed stick to disengage the sediment from the vessel, and it is some time before the utensil is got clean and free.

These cases are so distinct from cystitis, and from their very character show, that large secretions from mucous membranes cannot, and do not, arise from inflammatory conditions, and that cystitis is not, and cannot be, catarrhus vesicæ.

In these days the faith put in school dogmas is sure, sooner or later, to be discussed by the young and thinking men rising up amongst us. As I have only truth to serve, I must, from forty years' experience, show cause for endeavouring to disabuse the medical mind of error, lest high authority should override truths in nature.—Your obedient servant,

Bruton-street, W., Jan. 22rd, 1873. BENJN. RIDGE, M.D., F.R.C.S.

Dr. J. F. Macevers, of Cork, complains very justly of the treatment to which the medical officers who worked so energetically during the late small-pox epidemic in that city have been subjected. They were paid, it would appear, merely as dispensary physicians, and their extra labour during the epidemic was treated as part of their routine duty. The Town Council of Cork, in the event of another such visitation, will have no right to count upon services so heroically rendered, but so badly recompensed.

Messrs. Calvert and Co., (Manchester.)—The Report in question is published by the Government of India. We do not know where such Reports can be procured; but we will inquire.

Dr. H. J. Donovan.—There is no work specially devoted to that particular disease. Consult any good text-book.

Mr. W. L. White should apply to the agents of the vessels named at their advertised addresses; or he might consult any respectable medical agent.

N. C. H.—He is not justified in the assumption of the title.

GRATUITOUS OR PAID SERVICES (?)

A CORRESPONDENT puts the following case to us:—

A medical man, without friends or relatives, having accumulated wealth, sickens, is attended by a medical brother (with whom he is not very friendly) at his own request, and dies, leaving his property to strangers. Not a penny is left to medical objects. Under the circumstances, can the medical attendant (who also *gratuitously* assisted in carrying on the practice for a week or two) *properly* claim any remuneration for the personal medical services from the executors?

THE communication of *Mr. T. W. Sheppard* on the "Indian Medical Service" shall appear as soon as possible. The insertion of Dr. Mouat's name was, we believe, a misprint for that of Dr. Muir, and we shall therefore alter our correspondent's letter in this respect.

J. W. H.—Our correspondent institutes a comparison between two very different things. Much will depend upon the place in which he intends to practise.

Mr. R. F. Popham, (Nottingham.)—We do not know of any institution of the kind. The best plan would be for our correspondent to make some arrangement for the patient's reception into a private house; with a medical practitioner would be preferable.

Omega.—The vaccination gratuity has been conferred pretty liberally we think. Consideration will probably be given to our correspondent's note, the receipt of which was acknowledged "with many thanks."

Dr. Dolan, (Halifax.)—Thanks. We should be glad to have the paper explanatory of the new system of ventilating drains, with the ground plan referred to by our correspondent.

Mr. Westmacott.—It would be an exceptionally large dose for an adult, and a dangerous one for a child. Its immediate action would be purgative in both cases, followed, possibly, by symptoms of mercurialism.

Yarmouth.—Curtius's Greek Grammar, with Smith's Exercises, will form an excellent introduction.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Hassall; Sir Sydney Waterlow; Mr. Haynes Walton; Mr. Rendle; Mr. Braine; Dr. Rogers; Dr. Tilt; Dr. Morris, Barnsley; Mr. C. Bruce; Mr. Atkinson, Sheffield; Mr. J. D. Hill; Dr. Reid, Pembroke; Dr. Torrance, Wolston; Dr. Maclagan; Mr. Carr; Mr. Spilsbury, Bathurst, West Coast of Africa; Mr. Combe; Dr. Kraus, Vienna; Mr. Pierce; Mr. Reeves; Dr. Abrath, Sunderland; Mr. Sloman; Mr. Ryder; Dr. Phillips; Dr. Hughes, Bala; Dr. Martin, Tewkesbury; Mr. Langworthy; Mr. Best; Dr. W. L. White, Thackley; Dr. Walker, Birkenhead; Dr. Beveridge; Mr. Birt, Towcester; Mr. Young; Dr. Shaw; Mr. Archer; Dr. Barber; Dr. Ramsden, Dobscross; Dr. M'Kinnon, Harwich; Mr. Hayward; Dr. Dyce Brown; Dr. Porter; Rev. C. Driscoll, Biarritz; Mr. Ward, Hammersmith; Dr. Lyle, Newcastle-on-Tyne; Mr. Atwell; Mr. Jenks; Mr. Rawson; Mr. Wright; Mr. Bolton, Chorley; Mr. Kennett; Mr. Rowland; Mr. Butler, Tralee; Mr. Godfrey; Mr. Whitwell, Litchfield; Mr. Wallace, Burnley; Dr. Jackson, Birmingham; Mr. T. C. Wigg, Southminster; Mr. Christian, Furneaux Pelham; Mr. Harland; Mr. Westmacott; Mr. Blaise; Mr. Hawksley; Mr. James, Forres; Mr. Hadley; Mr. Blackett; Mr. T. Watson; Dr. J. C. Murray; Mr. Goode, Manningtree; Dr. Farquharson, Castle Carey; Mr. Whitaker, Brading; Mr. Bennett, Dorking; Dr. GreatRex, Lawton; Mr. Gaskoin; Dr. Alderson, Hammersmith; Mr. Robertson, Glasgow; Mr. R. F. Popham, Nottingham; Mr. Ferguson, Peebles; Dr. Dickson, Buxton; Mr. Horman; Dr. Woodman; Dr. Ridge; Mr. Graves; Dr. Crombie; Mr. J. Irvine; Mr. J. Smith; Dr. Gill; Dr. Maturin, Alderney; Mr. Ricketts; Mr. Scott, Queensland; Mr. Snape; Mr. Horncastle; Dr. A. Watson, Dresden; Mr. Andrews, Mold; Mr. Benson, Shiffnal; Mr. Pick; Mr. Bond, Exeter; Dr. Coales; Mr. J. Robins; Mr. T. Walton, Ipswich; Mr. R. Keevil, Cork; Mr. Griffith, St. Helen's; Mr. Evans, Taunton; Dr. Crighton, Mortlake; Mr. Dennett; Mr. Wallis; Dr. R. E. Hooppell, South Shields; Mr. South; Dr. Robertson, Liverpool; Mr. Davis; Mr. R. Cassidy; Mr. Adams, Maidstone; Mr. Walker, Corwen; Mr. Eastes; Mr. Lewis; Mr. R. Reynolds; Mr. W. M. Thompson; Dr. Constable; Mr. A. Beardsley; Mr. R. Elgood; A Subscriber; The Secretary of the Zoological Society; E. C.; Olecranon; Viator; T. I. P.; Ex uno disce multos; J. W. H.; F.R.C.S.; Enquirer; A. W. B.; J. S. G.; A Tradesman with a Large Family; X. X.; Yarmouth; One who would wish to see all Examinations up to the Standard; &c. &c.

Brighton Daily News, Canada Lancet, Leeds Mercury, Evening Express, Todmorden Weekly Advertiser, Middlesborough Gazette, Durham County Advertiser, Globe, Aberdare Times, Weekly Hampshire Independent, Iron, Midland Gazette, Canada Medical and Surgical Journal, Retford News, Penrith Observer, Manchester Courier, Devizes Gazette, Cork Examiner, Daily Chronicle, and *Downpatrick Recorder* have been received.

Medical Diary of the Week.

Monday, Feb. 3.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—2 P.M. General Monthly Meeting.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Erasmus Wilson, "On Dermatology."
MEDICAL SOCIETY OF LONDON.—8½ P.M. Lettsomian Lectures: Mr. Henry Lee, "On Urethral Discharges." No. III. Different, Non-Syphilitic Discharges.

Tuesday, Feb. 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Rutherford, "On the Forces and Motions of the Body."
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following Specimens will be exhibited:—Extensive Hairy Moles (a living subject); Drawing of a Hairy Mole which covered the whole of the back; Simple Stricture of Hepatic Duct, associated with Vitiligoidea; Cancer of Ileum, causing Dilatation; Aneurism of the Arch of the Aorta partly Cured; Aneurism of Subclavian Artery, showing the process of Natural Cure; Urinary Calculi from India; Drawings of Elephantiasis Arabum; Secondary Sarcoma of the Lung and Mediastinum; Simple Ulcer of the Duodenum, causing Obliteration of the Gall-bladder and Hepatic Duct; &c.

Wednesday, Feb. 5.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 3½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Erasmus Wilson, "On Dermatology."
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. President's Address.—Professor Lazarewitch, "On a Case of Puerperal Convulsions."—Dr. Braxton Hicks, "On two Cases of Cephalotripsy."—Dr. Heywood Smith, "On the Injection of Perchloride of Iron in Post-partum Hæmorrhage."—Dr. Bantock, "On the Pathology of certain so-called Unilocular Ovarian Cysts."
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Anniversary.

Thursday, Feb. 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Dr. Armstrong, "On the Formation of Organic Substances."
HUNTERIAN SOCIETY.—7 P.M. Annual General Meeting for the Election of Officers.—8 P.M. Annual Oration, by Mr. Arthur Durham.
HARVEIAN SOCIETY OF LONDON.—8 P.M. The following papers are expected to be read:—Dr. Westmacott, "On a Case of Skin Disease produced by Coloured Gloves."—Mr. T. Carr Jackson, "On a Case of Excision of the Hip-joint."—Mr. de Méric, "On Gonorrhœal Abscess."

Friday, Feb. 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Erasmus Wilson, "On Dermatology."
ROYAL INSTITUTION.—9 P.M. Prof. Ramsay, "On Old Continents."

Saturday, Feb. 8.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Dr. Freeman, "On Comparative Politics."

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Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.